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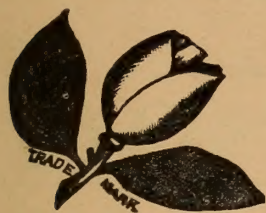
HARDWARE

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MERCHANT

VOL. IX

MONTREAL AND TORONTO, JULY 3, 1897

No. 27



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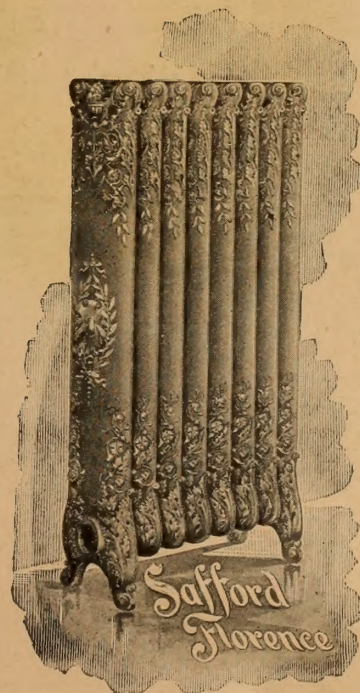
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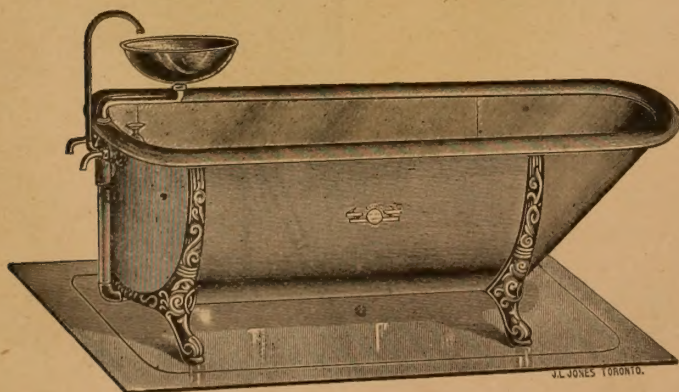
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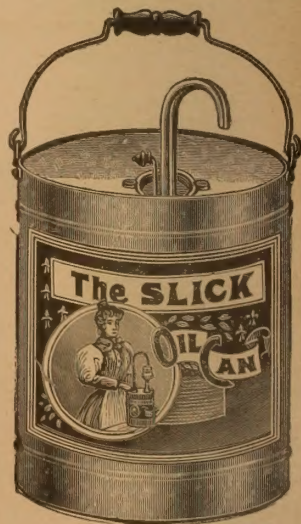
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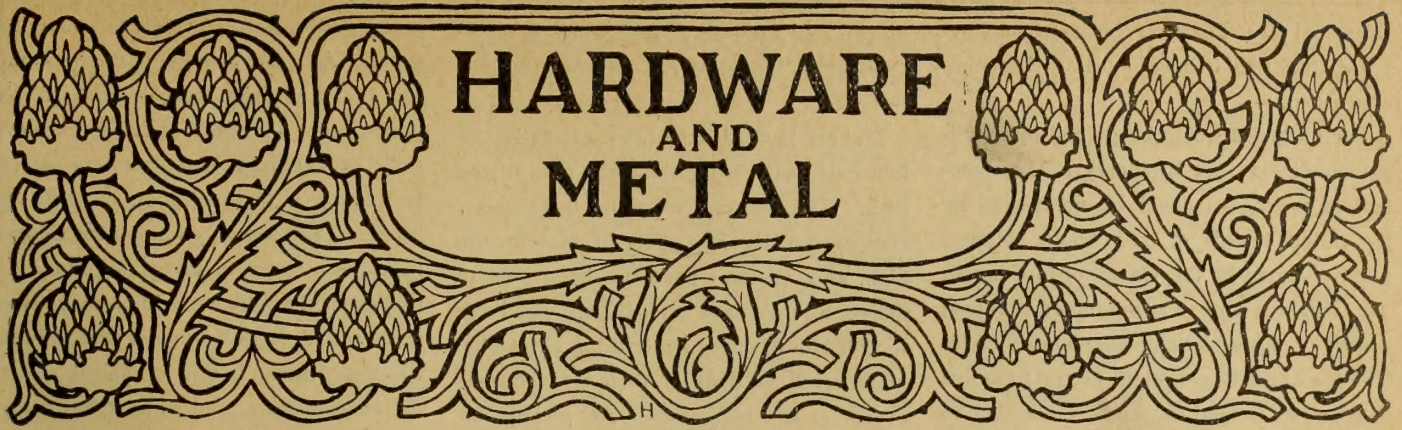
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REMEDY FOR TARIFF BUNGLING.

BUSINESS men in Canada are with good reason dissatisfied with tariff revisions. It does not matter whether it be Conservative or Liberal Government, a more or less bungle is made of the job. The fault, however, is due more to the lack of qualification in the framers of tariffs than to the presence of ulterior motives or dishonesty.

Practical acquaintanceship with the articles covered by a Customs tariff supplemented by business commonsense are the essentials which those who frame tariffs should possess.

But these are essentials which the framers of the present tariff, like those who framed the tariff which preceded it, did not possess, or at least only to a small degree indeed. And because they were professors of law, medicine or of politics they could not be expected to possess the desideratum.

The man of law, of medicine or of ward politics can no more be expected to be an expert in purely business matters than can the man of business be expected to be an expert in law or medicine. Although we do not, however, go to the man of business for law or medicine, we have got into the

absurd habit of relegating to lawyers, doctors and other types of professional men the transaction of matters purely within the sphere of business ethics.

While we in Canada have much cause for complaint in regard to tariff tinkering, the people in the United States have more. There, not only is incompetence exhibited, but positive malfeasance of office as well, on the part of those who have the framing of the tariff laws, while to these is added months of unnecessary time spent in dilly-dallying with the tariff to the detriment of the trade of the country.

For a remedy for this state of affairs the business organizations of the United States have long been searching, and various schemes have been suggested. At this very moment there is a bill before the House of Representatives at Washington having this object in view.

This bill provides for the appointment of seven commissioners, who shall be invested with power, under certain conditions, to suspend, with the written approval of the President of the United States, any part or the whole of any tax upon imports or of any internal tax. The terms of office of the commissioners are to range from three to twenty-one years. The salary is to be \$7,500 per year except in the case of the chief commissioner, and his remuneration it is proposed to make \$8,000. These commissioners are to be appointed by the President subject to the approval of the Senate.

The bill has come in for a great deal of adverse criticism and it is not likely to be adopted by Congress. The New York Journal of Commerce heartily agrees with

the promoter of the bill "that the people are tired of tariff legislation," but terms the scheme preposterous. Its objection is chiefly two-fold, namely, "that it is a usurpation of the legislative rights of Congress and is therefore unconstitutional, and that President McKinley could be depended upon to appoint only protectionists."

We can, however, afford to allow our cousins to the south to discuss the pros and cons for themselves. All we need to concern ourselves about is as to how a similar scheme would apply to Canada.

There are times when tariff revision is necessary. The tariff of 1894 stood in need of revision. But frequent revisions of the tariff should not be necessary. They unsettle trade. But just as often as a thing is badly done, just as often has it got to be done over again. And that is why the people of Canada, like those in the United States, are heartily tired of tariff legislation.

But while we are heartily tired of the manner in which our tariff has again and again been revised, yet there is a wrong as well as a right way in going about getting a remedy.

And were we to go about the matter after the similitude of the promoters of the bill now before the United States House of Representatives we would be wrong, simply in the first place because we would be spending our strength for naught: The duty of regulating the trade and commerce of the Dominion has been delegated to Parliament by the constitution.

What the business men of the country can do, however, is to insist that the duty of framing any and every tariff shall be

delegated to a board of business men representing the various existing branches concerned.

Such a board would be guided by practical experience, not by theory. The members of the board could be nominated by the various boards of trade in the country, and appointed by the Governor-in-Council. This would reduce to a minimum the possibility of partisans being appointed thereto. The life of the board might extend from five to ten years if need be, and in addition to its duties as a tariff framer it might act as a sort of advisory board to the Controller of Customs. It need not be an expensive institution, for except when actually engaged in an extensive revision of the tariff, it would be necessary to hold but a very few meetings in a year. The remuneration might be so much per diem.

Of course, in the work of revising the tariff whatever the board did would have to be passed upon by Parliament, but the most ardent partisan would hesitate before daring to interfere with that which the board of experts had set up.

It is to be hoped that at the next session of Parliament the Government will give this matter its serious consideration.

WIRE NAILS STILL UNSETTLED.

THERE is some speculation in trade circles at present whether the aggregate volume of trade in cut and wire nails this spring has not been greater than last. Even the best informed men in the trade admit that it is difficult to answer, for the reason that a reliable comparison is impossible.

Last spring all Canadian makers were members of the cut and wire nail associations, and on this account pretty close track could be kept of the output of the different concerns. This year each maker sails under free colors, and it is hard to ascertain whether he is doing more business or not. The consensus of opinion, however, is that the aggregate volume of trade has not been very much greater, despite the admitted fact that there was quite a rush during May and the early part of June.

Careful observers admit it is quite possible that individual concerns have done a greatly increased trade, as they have not been bound to a fixed price, but what they have gained has been more than lost by

others. In fact, at the present moment complaints of cancelled orders are numerous.

Makers booked quantities of nails for future delivery during the early part of the rush. The figures governing these sales, compared with ruling offers at present, are high, and, as many have not been able to deliver all they have sold, buyers who have received lower offers are refusing to take the undelivered portions of their old contracts except at the reductions. At present, for instance, the nominal figure for car lots of wire nails is \$2 f.o.b. Montreal, but it is no secret that makers are freely offering such quantities at \$1.90 base.

In view of this unsettled position no United States wire nails have been sold either in Quebec, Eastern Ontario or the Maritime Provinces. Canadian prices were too low. Manitoba and the Northwest are the only sections where anything like a large quantity of United States nails have been sold. Across the line also, according to an exchange, it is stated that there will be a general shut-down of wire nail mills during the month of July. "While," says the paper in question, "there has apparently been no positive agreement among manufacturers an agent of a large company stated that there was practically a tacit understanding to close for the month. Some manufacturers, however, claim that no time has been set. This movement is not the result of an overstocked market, as stocks will generally be well cleared up at the end of this month, a prominent manufacturer, indeed, stating that his stock would be absolutely cleared out at that time, and that he had satisfactory orders ahead to begin on in August, when the mills open again.

"One reason advanced for the shut-down is that the manufacturers wish to make repairs and improvements in their plants. It is reported, however, that during the next month efforts will be made to secure better prices. When the nail pool collapsed about six months ago, nails were selling nominally at about \$2.55 per keg, but the actual price was about \$3. At present, the price is about \$1.40. Manufacturers have generally done a large business at the lower prices, one agent stating that the output of his company the past six months had been the largest on record. Present prices, however,

it is claimed, hardly leave a fair margin of profit. A former member of the pool stated that it had not been reorganized. It is reported from excellent authority, however, that the steel billet manufacturers are contemplating a reorganization of their combination, and are only waiting for Congress to adjourn to try to bring this about. In that event the Nail Association may also be renewed. A consolidation of wire rod mills, as already noted in this journal, is also under consideration, and while it has not thus far materialized the scheme has not, it is stated, been definitely abandoned. Altogether, the jobbing trade is apparently anticipating new developments during the next month."

CANADIAN VS. U. S. TACKS.

SINCE the change in the duty on tacks, manufacturers in the United States have been making an effort to introduce their product into Canada. In fact, orders for small lots have already been placed, and some at least of the wholesalers have the imported article in stock.

Whatever the future of the United States tack in Canada may be, one thing is certain, it does not at the moment please, as far as HARDWARE AND METAL can learn.

The objection is, first of all, to the package. In both attractiveness and neatness it is far inferior to the package which encloses the Canadian made tacks. The outer package is decidedly inferior in every way. Containing as it does three rows of the small packages in place of the home-made package's two, it is necessarily much flatter and consequently does not present as nice an appearance on the shelves. Then this package is practically so much brown paper wrapped together and gummed like an ordinary parcel, which must be torn open before the retailer can reach the small packages within, while the Canadian article is a neat box with a convenient detachable cover.

But the greatest objection probably of all is in regard to the individual small packages which contain the tacks. These are only partly filled, while the Canadian maker fills his tightly. The effect of this upon the consumer in Canada who has been in the habit of getting a full package is obvious.

It will thus be seen that the United States tack is displeasing to both the consumer and the merchant.

SPELL OUT THE WORD "LIMITED."

THERE has been quite a stir among the limited liability companies operating under the Ontario "Act Respecting the Incorporation and Regulation of Joint Stock Companies" in consequence of the amendments made thereto at the last session of the Legislature. And it is chiefly due to the regulations governing the word "limited."

As is well known, the practice heretofore with most joint stock companies has been to abbreviate the word "limited" wherever it occurred.

Under the amended law this word must be spelt in full. Clause 22 of the Act which governs this matter reads as follows:

Every company shall have painted or affixed its name, with the unabbreviated word "limited" as the last word thereof, on the outside of every office, or place in which the business of the company is carried on, in a conspicuous position, in letters easily legible; and shall have its name with the said unabbreviated word in legible characters in all notices, advertisements and other official publications of the company, and in all bills of exchange promissory notes, indorsements, cheques and orders for money or goods purporting to be signed by or on behalf of such company, and in all bills of parcels, invoices and receipts of the company.

Violation of this clause entails a penalty of \$20 per day on the company while such word "limited" is abbreviated, and also a

like penalty on every director and manager "who knowingly and wilfully authorizes or permits such default."

But the poor director, manager, or officer of the company who uses or authorizes on any document whatsoever the use of any seal of the company in which the word "limited" is abbreviated shall incur a penalty of \$200, and shall furthermore be personally liable to the holder of the bill of exchange, promissory note, cheque or order for money or goods for the amount thereof unless the same is duly paid by the company.

This is a pretty strict law, and it is not surprising that so many should be running to cover. The rubber stamp manufacturers in Toronto have been extremely busy during the last few weeks making stamps with the word "limited" upon them, and a good many documents do not present the neat appearance they formerly did, while joint stock companies with their names on signs or delivery wagons are either painting the word which is causing so much consternation out in full or having printed slips of paper pasted thereon.

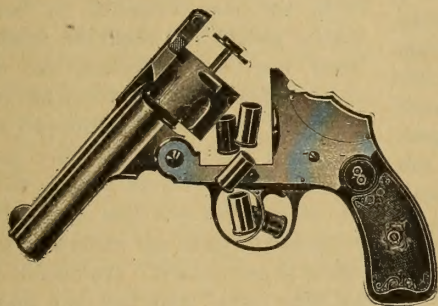
It would be well for joint stock companies

to see that their position in regard to the word "limited" is secure, for already some companies have been brought into court.

Anything in business that will not stand the search light should be buried—or cremated.

HAMILTON BOARD OF TRADE.

At a meeting of the Hamilton Board of Trade on Monday, the following officers were nominated: For president, James Turnbull, Wm. Vallance and George Rutherford; for vice-president, W. F. Findlay; for secretary-treasurer, C. R. Smith; for council (eight members), John Knox, W. H. Gillard, Geo. Roach, Alex. Turner, J. J. Mason, Senator Sanford, T. H. Macpherson, M.P., and W. A. Robinson; for Board of Arbitration (four members), B. E. Charlton, J. M. Lottridge, R. A. Lucas, W. C. Breckenridge and W. H. Lambe; for auditors, John Bell and F. H. Lamb. Mr. Robinson was renominated as president, but declined, and Mr. Findlay also declined that honor. Matthew Leggatt and Wm. Hendrie were also nominated, but declined. The elections will take place by ballot next Monday.



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INDIVIDUAL CREDITS.*

By James G. Cannon.

CREDIT is created by the desire to do business, and thereby secure a profit. For example: A is well and favorably known to B as a man of strict honor and integrity. He may be a producer, but without ready money. He may be desirous of buying goods. B has the commodities and wishes to sell them; therefore B finds it agreeable to supply A's wants for a consideration of profit, upon his promise of future payment. In this way credit is brought into play, and its continuance is justified by the prompt fulfilment and faithful performance of all the duties and obligations imposed by the contract, but if too easily obtained it promotes extravagance.

The question naturally arises: Upon what basis should individual credit be granted? No inflexible rule can be laid down, but the underlying principles of this form of credit that suggest themselves to me are character, ability, capital and producing power.

Individual credits properly dispensed call for the exercise of diplomacy, mature judgment and eternal vigilance, and one should be especially conservative in extending liberal credits on the luxuries of life. For instance, where a customer might, without criticism, buy a five hundred dollar house-furnishing goods bill, he might very properly be refused a credit of three hundred dollars for purchases made in the dress goods department.

The good customer, though unreasonable and unjust in his demands, must be retained. It is the man who pretends to be good and is not, who must be refused and avoided. Tact in this, as in other departments of business activity, is indispensable.

Many merchants trust out their goods indiscriminately and sustain losses that handicap them in the payment of their obligations to the wholesale dealer, and the resultant ill effects are communicated all along the line of credit, reaching finally the manufacturer and his creditor. Therefore, if we can build a better basis for individual credits, the whole commercial edifice will be strengthened with benefit to all concerned.

Notwithstanding the fact that the granting of individual credit is one of the most delicate and important questions upon which the merchant has to pass, I believe that very few retail merchants, if called upon for an opinion as to the basis of their credits, could give a specific or intelligent answer.

EDUCATION NECESSARY.

The average retailer throughout the country needs education in this and kindred lines, and he should be brought to realize

that it is to his interest to follow some well-defined system of granting credits. He will often "size up" a man on the spot and sell him a bill of goods without even knowing the party's full name, or, relying, perhaps, on his supposed ability to judge something of his means or affairs because he is an acquaintance, he will trust him without any investigation as to his financial worth.

Some retailers, I find, have not taken stock for years, believing it to be unnecessary, because, as they say, all they have on their shelves belongs to them. Others do not even keep books. Careful attention to details, and a thorough system of book-keeping, are prime factors in determining a merchant's success. If he is careless in his methods he is likely to find his customers tardy in meeting their bills.

If the retail merchant would only change his method, ascertain the cost of conducting his business and the profit on his sales, keep his books in such a shape as to enable him to know at all times whether he was making headway or losing ground, he would be in a position to adopt corrective measures when necessary, and avoid the shoals and rocks that would otherwise bring disaster upon him.

Some good wholesome educational work seems to be in order, and where the jobber or wholesaler finds that a retailer to whom he is selling his goods has extended credit beyond prudent limits, compared with his own resources, although it be to persons of large means, he should confine him to the shortest possible terms, and force him into a system of making quick collections, for the nearer a retailer reaches a cash basis the better will be his position. If he pays cash for his goods he is not likely to sell them on any other terms, and when he does give credit, he will exercise more care in its extension.

If the wholesale houses will give their retail customers the benefit of their wide experience, knowledge and counsel, as to the best business methods to be adopted, it will be of mutual profit and advantage. So long as retailers pay their bills with ordinary promptness the wholesaler has no occasion to interfere, but when they become slow he is compelled to look over the situation, and in nine cases out of ten retailers will plead in extenuation of their tardiness that some of their own customers owe them large bills which they are unable to collect. How needful it is, therefore, that all unknown quantities should be eliminated, and that a painstaking investigation should determine the character, financial strength and integrity of every credit risk.

Considerable strategy must be used at times to secure information touching indi-

viduals supposed to be possessed of large means, and who are so reticent about their affairs that it is not deemed prudent to ask questions. You would be surprised to learn that some of the richest and most substantial houses in the large cities will seek for data through the instrumentality of janitors of apartments, butchers and tradespeople generally. Perhaps information thus gleaned is not always of value, but at the same time such people hear and see things of which it is important that the dispenser of individual credits should have knowledge. The question may be asked why are such methods resorted to, and the only answer that can be given is that retailers are fearful of making too many inquiries direct and driving away trade that is a source of profit to them. These practices should not be necessary, and prejudice against giving information on the part of individuals will be overcome by proper educational work, just as reluctance to give information on the part of borrowers is being removed by the requirement of signed statements.

A CAUSE OF SUFFERING.

During the past few years we have been suffering not alone from the failure of business firms and corporations, but from the straining of individual credit which in my opinion has been responsible in a large degree for the prevalent unsatisfactory condition of business affairs. Many people have been living beyond their means, and since the panic of 1890 especially, individual credit has been extended far beyond its normal limits; as a result the whole line of credit has been disturbed, and the slow undermining of the foundation has gradually weakened and finally destroyed many of our noble institutions of trade and commerce. We have been passing through an era of extravagance that has been more pronounced than at perhaps any other period in our history. The credit structure has been reared upon faith and supposition, rather than upon tangible property and financial strength.

The Reverend Charles H. Spurgeon testified:

Something should be known regarding the financial resources and character of each debtor. Information respecting business men can be secured with respective ease, but in the case of professional men, and those living on incomes, the problem is not so simple. Therefore references should be required in all cases, and they should be looked up with great care for the reason that while the first purchase may be small, the account, once opened, may increase in importance without attracting attention. If the customer is buying goods on credit from other sources, enquiry should be made as to whether his payments are satisfactory. Where real estate is owned, some specific data as to its value should be gathered. After the investigation is completed, and all the available information is at hand, a credit limit should be carefully fixed, and beyond this point the account should not be permitted to pass until it is ascertained by further research that the increased line can be safely extended.

A retail credit man should know when to say no, and

* An address delivered on June 9 before the Credit Men's Association, St. Louis.

should have the force of character necessary to say it; moreover, he should make the refusal in a way that will give no offence.

Many people, especially those who are wealthy, are very negligent about paying their personal bills, and tradesmen and professional men are obliged to carry them longer than should be necessary, thus entailing upon them heavy losses of interest and profit.

It is a conceded fact that frequent settlements between debtor and creditor contribute to better profits in all lines of trade; whereas laxity in making credits and collections is the direct cause of a large proportion of the failures of retail merchants throughout the country.

RICH MAN'S PANIC.

It has been truly said that the period covered by the last three years has been the "rich man's panic," and many of the wealthy people have allowed their accounts to run past due. The flagrant abuse of credit and confidence at their hands should be corrected. They think nothing of taking a trip to Europe or out of town, leaving unsettled their accounts with their butcher, grocer and tradespeople generally, who fear to bring the least pressure to bear upon them, as they usually take the greatest offence when asked to meet an obligation that may, perhaps, have been long past due.

I would lay special emphasis upon the importance of retailers rendering their bills promptly, as such a practice will undoubtedly ensure better collections, and will also have the effect of educating their customers as to proper business methods.

I have in my mind a prominent mercantile house in one of the large cities of the United States, which a few years ago became embarrassed, simply because they trusted people from whom they were not able to force collections. Their credits were loosely managed generally. They were also dilatory about sending bills for goods charged, which promoted extravagance among their customers and led the concern into a position from which they were unable to extricate themselves. Their trade was with a class of people supposed to be wealthy and fully able to meet their engagements, but it transpired that they were mistaken in their estimate of their responsibility. Systematic investigation would have revealed this weakness and saved them from ruin.

The drift in the retail line at present seems to be in the direction of closer terms, and it is now generally considered that an account that is not settled in thirty days is not desirable, whereas, years ago, retail merchants carried on their books a great many credits that ranged from six months to a year. In some quarters there is an apparent tendency to do away with the credit system entirely and reduce trade to a cash basis.

COMPETITION IN BUSINESS.

The question of competition in business is one that all departments of trade must meet, and the retailer who grants credit must recognize existing conditions and regulate

his prices to meet those offered by dealers who sell for cash. Under these circumstances, unless his credits are made under a safe and well-defined system and his business is conducted on an economical basis, his success will be problematical.

To show the advantages to be derived from conducting business on a cash basis, especially in large transactions, a little article—a silverback hair-brush—owing to competition has been reduced in price to \$4; from this price there is a discount of 10 per cent. for cash. The small retailer is generally unable to avail himself of this cash discount, so the brush costs him \$4. An order for three thousand of these brushes was recently filled for a large department store at a net cash price of \$3. The manufacturer, to be sure, did not make much, but he was able to keep his plant in operation during the dull times, with the certainty of receiving his money, which came to him all at once. The department store could retail these brushes for cash at \$3.90 each and make 30 per cent. profit, and yet, you see, the brushes would be sold for less than the cost to the small retailer. They were only able to do this by handling their business on the cash basis.

This system also saves a great deal of time and annoyance to the customer in waiting for change, by making it possible to pay in one sum the bills for a considerable period of time.

SAFETY OF THE CASH MERCHANT.

The merchant who gives credit may do a very extensive business and appear to be enjoying the fruits of prosperity in good times, and he will doubtless succeed in handling a larger volume of trade than the one selling for cash, but when a panic comes and depression sets in, and the incomes of his debtors are depleted or entirely suspended, he will in many instances be forced to the wall, while the cash merchant who did not owe anything and had no one owing him, will continue his business as usual, and will probably make more money twice over than he lost by not selling on credit when times were favorable; but even if the credit merchant succeeds in weathering the storm, his books will bear unmistakable evidence of financial wrecks left in its wake, which will be painfully apparent when he requires money to meet his maturing obligations and replenish his stock.

Judicious credits are of incalculable benefit; but I think that in retail lines they should be carefully restricted. It seems to me that the merchant who brings his business nearest a cash basis will eventually find he is the most prosperous.

In Chicago, recently, the steel skeleton of a nine-storey building was erected in twenty-nine days.

Break Away

From the old methods. Get out of the rut. In these days, to be successful, you must employ the latest improvements, the best methods and handle the best goods.

Making money was an easy matter in the old days compared with to-day. Nevertheless, **if you get on the right track**, you can make money quicker, and more of it, to-day than you could then. It's all in getting on the right track.

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THE SCISSOR TRADE.

IN the last issue of *HARDWARE AND METAL* we gave the conclusions reached by a commissioner of The Ironmonger in regard to the file trade in Sheffield. This commissioner has also reported upon the German and American competition in scissors, and as he has arrived at estimates of the facts that surround the somewhat difficult question by being guided by the views of men of the ripest experience, we consider his report of value.

To a person without practical knowledge of steel the purchase of a pair of scissors presents as much difficulty as the buying of a file. Every pair of scissors sold will cut at first, but what is wanted is a pair that will not easily break, and that can be ground to cut without main force, when the first edge is worn off. How, then, is a person to choose? People say that the appearance of a pair does not influence their choice in a store. But it must, and such an error has to be guarded against.

It is by the means of a highly polished finish that the German product has to some extent superseded the Sheffield scissors, the commissioner claims. The English manufacturer will not deign to stoop to such tactics. He certainly manufactures cheap scissors, but he will not conceal their inferiority by a bright finish, and sell them for what they are not. The Sheffield manufacturer knows that he has the best steel in the world for cutlery, and thinks that he should not ruin the worth of an ancient industry by the extraordinary schemes of the foreigner. He claims, too, that machinery has done nothing to aid or quicken the manufacture of high-grade scissors, and that all scissors not hand-made are of such a quality that no dealer in metals should countenance their presence on his premises. In the words of the report, they are "miserable mockeries of honest working tools."

Although it would be the height of absurdity to say that there is not a firm in Germany or America that is able to put a high-class article on the market, a glance at the markets will show that it is equally foolish to contend for German or American superiority or equality in price, quality and all other things that make the two lines equal. The Americans and Germans have yet to learn the secret that has led to the planting of a great colony of cutlers and steel manufacturers in the heart of the country away from the sea, and away from the usual means of communication.

The only advantage these manufacturers have over Sheffield's experience and establishment is cheap labor, but even with this advantage their scissors are much higher

priced. The German scissors, too, are rising in price, and will continue to do so. They cannot be bought to-day at the price asked ten years ago. This of itself, in the opinion of the commissioner, will tell in favor of the English producer.

Combining the import of these facts the commissioner has come to the conclusion that Sheffield makers of scissors need not put up their shutters. He, however, recommends that "hand-made" be stamped on each article, and then when the test of wear and tear is applied he predicts that Sheffield scissors will rise above the reach of the long arm of competition.

POOR BOYS IN BUSINESS.

"OUR experience is that poor boys do better than the sons of well-to-do men; they appreciate their situation and a slight raise in wages better." Such, says an exchange, was the remark of a well-known grocery jobber, one of the many who have worked their way from office boy to a partnership. It is often the case that boys trained in the public schools, accustomed to scanty fare and a home with the bare necessities of life, frequently distance those educated at a private school and who live luxuriously and enjoy the best social advantages. The latter lack that appreciation of the necessity of hard work and faithful service as a means of promotion that the poor boy entertains. This is not so much the fault of the well-to-do lad as it is to the wrong sort of training. Their parents seek to save their boys from hard labor or the menial work which they did when making a start in life, and therefore do not properly estimate the value of work nor pay that strict attention to details which is necessary to success in life.

Rich men's boys that have been well educated and correctly trained, we believe, stand a better chance in the race of life than the poor boy with ordinary advantages and well trained. We have an instance of this from the life of the late Theodore A. Havemeyer, whose father was many times a millionaire and whose family connections were with the oldest and best families in New York. Mr. Havemeyer often told, with pardonable pride, the story of his boyhood life. In alluding to the early training of himself and his brother Henry, he said:

"We were taught our business thoroughly. After leaving school I was sent to Europe to learn all I could concerning the business I was to follow for a livelihood. On my return, in 1859, I went into my uncle's refinery in Vandever street, and from there I went into the business in Williamsburg. I made up my mind from the start that whatever was worth doing at all was worth doing well. For twenty-five years I was at work

at 7 a.m., and did not leave the refinery until 6 p.m. I never went to bed at night until I had gone through the whole establishment. Many times I worked all the night long. While I was a single man my expenses never exceeded \$50 a month. Pilot bread and cheese made for me many a meal. A canvas suit was my daily apparel, and there was no part of the business at which I and my brothers did not work; no part we considered too dirty or too arduous or beneath us. One prerequisite in any business is a thorough mastery of its principles and a knowledge of all its details. There was no part of the manufactory or of the refining business with which we were not thoroughly familiar. I know how to fire up under the boilers; how to run the engines. I built an engine once myself. I knew how to refine sugar, and how to market it. I knew what was a fair day's work for a man, because I worked alongside of the men. Another requisite is application and alertness. We were always on the lookout for some better way to do a thing, and our success is largely owing to invention brought out by observation and experiment. Another need is integrity and promptness in business dealings. We always paid cash as we went along, but, if one has to give notes, they should be promptly met. We filled our orders always according to agreement. Another rule is to keep away from liquor, and we always followed it. The practice of these rules, combined with frugality and ordinary faculties of mind, will bring commercial success to any man."

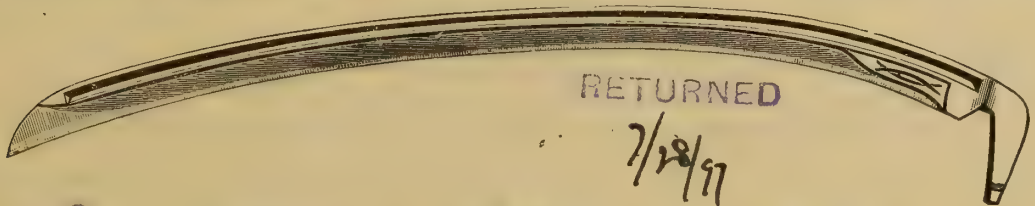
How much truth is contained in the above simple outline of a start in life? The boy that is afraid of continuous hard work, and who tires of detail, will never make much of a place for himself. One of the hardest-working men in one of the largest firms in this city won a partnership because he put his whole soul into the business. When he began with the firm he was told to be on hand at 8 a.m. Later, the senior partner asked if it would inconvenience him to be at the store at 7 a.m. and look after a particular branch of the business. Quickly and interestedly he replied, "Not at all." And he was faithful to the new trust. Again, he was asked if he could just as well get down at 6 a.m., and once more with cheerful manner said that he would. And he did; and not only that—he did his level best at every point and demonstrated that he loved work, was not afraid of details, and could be relied upon at any place in the great business. Boys of that stamp are sure to win a partnership, whether the sons of poor or rich men. Successful business men owe it to their sons to give them the right sort of training; to teach them to honor toil and to know the value of details and dollars.

H. S. HOWLAND, SONS & CO.

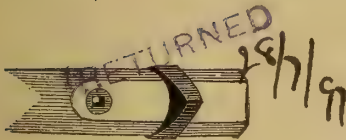
WHOLESALE
HARDWARE

37 Front Street West, TORONTO.

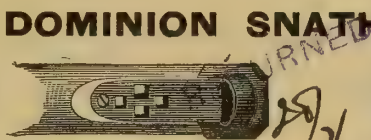
RIXFORD'S GRASS, CRADLE, LAWN AND BUSH SCYTHE



DOMINION SNATHS ALL KINDS.



Three Ring and Wedge.



Loop and Solid Plate.

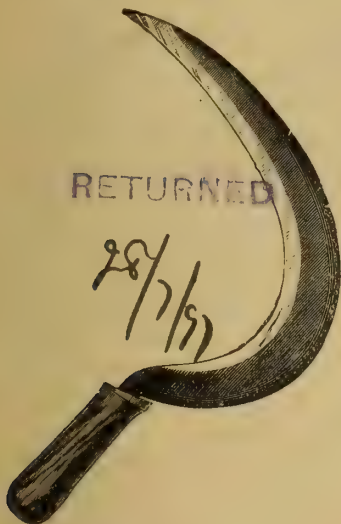


Pat. Swing Socket.



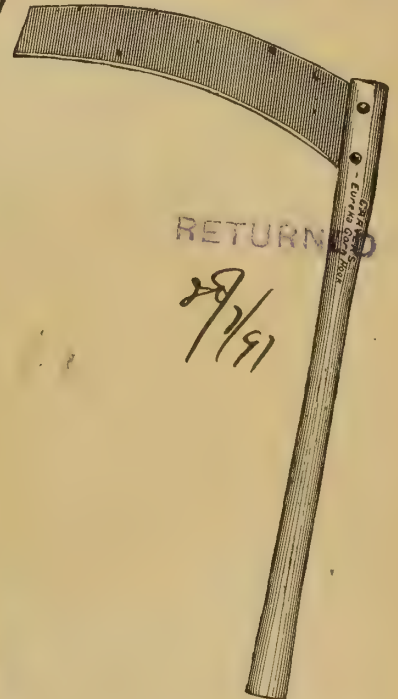
Double Ring Bush.

**HAY RAKES
GRASS HOOKS
CORN HOOKS**



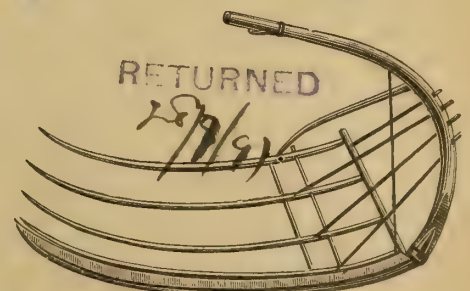
RETURNED

28/7/97



GRAIN CRADLES

HALF MULAY
IMPROVED MULAY
FULL MULAY
FRENCH MULAY
MORGAN
TURKEY WING



HURON CHIEF
WESTERN RED END
PEERLESS
RED CROSS
ROUND ENGLISH



INDIAN POND
GREEN MOUNTAIN
EMERY SCYTHE STONE
EMERY MOWERS FRIENDS

...GRAHAM Cut and Wire Nails are the Best...

SOPKINS' BUSINESS START.

CHARLEY SOPKINS might be compared to the character known as

Flip McGill of Murray Hill
Who never worked and never will.

Charley reached the age of twenty-five years before he gave his family any real concern. After leaving the care of his governess he spent a term at a military school, and then took a course at one of the big colleges. His folks are wealthy, and Charley had everything he wanted while at school and college.

There was one thing about Charley which was commendable. This was that he was an obedient son. So when, after a family council, Ma Sopkins decided that Charley should enter business, he dutifully agreed to be bound by whatever Ma said.

As Pa Sopkins had long since retired from business, an old family friend, Mr. Brisk, of Brisk & Hurry, wholesale hardware dealers in New York City, was called in. He was perfectly willing to give Charley a chance, providing Charley would begin at the bottom of the ladder and try to climb to the top.

The next Monday morning found Charley at the office of Brisk, and dressed rather modestly for him. He arrived at the office before the senior member of the firm entered, which was a good point to start with. Mr. Brisk at home and Mr. Brisk at his office, Charley found out, was not one and the same person. While Mr. Brisk at home was genial and ultra polite, at his office he was stern and brusque.

"Good morning," Charles," was his formal greeting as he entered the office.

He sat down at his desk and began a fatherly talk to Charley while he was opening his mail. He spoke about two hundred words to the minute, and at the end of ten minutes Charley had his coat and hat hung in a closet and a vague idea that he was to be known as Mr. Brisk's confidential clerk, was to open his mail, copy letters, attend to his private errands, keep his desk and office in order and do anything that Mr. Hurry wanted him to do, for which he was to receive the munificent stipend of \$7 a week. The junior partner arrived after the senior as they all do, and Charley was introduced to him as the new clerk. He acknowledged the introduction with a condescending nod, and the next moment was flying around in a faded office coat and straw hat of the vintage of '87.

Charley just stared about at the busy scene in the big establishment for the next hour and tried to make up his mind to do something. He felt as if he would like to help the porters unload a truckload of nails, they did it with such vigor and vim. While Charley was staring at the porters Mr. Hurry bustled into the office, slammed open his roll-top desk, and, throwing down a pile of

papers, grabbed up a pen and was about to write, when he exclaimed:

"Confound it! That ink well has not been cleaned for a month. Here, young man, see to this, will you?"

Charley jumped up as if shot. The brusqueness of the order carried Charley off his feet. If his wealthiest uncle had been suddenly taken ill and wanted a pen to sign a will leaving him sole heir Charley could not have obeyed with more alacrity. He got the inkstand and started away from the desk; but then he seemed to forget what to do with it. He went outside and whistled for one of the clerks, but nobody paid any attention to him. Finally he got down to where the shipping clerk was engaged with a pile of bills of lading.

"Will you kindly clean this inkstand?" he asked the busy clerk.

"I'm sorry, but I've got a sore finger and I can't walk," replied the shipping clerk.

The clerk was too fresh for Charley, and he wandered around asking everybody he met to help him out without success. Suddenly a happy idea struck him and he rang a district messenger call. A boy appeared in a short time, and Charley had him clean the inkstand. When he returned to the office Mr. Hurry was writing at Mr. Brisk's desk and paid no attention to him.

For the next two weeks the district messenger call in Brisk & Hurry's was rung more than it had ever been in the existence of the firm. If Mr. Brisk wanted his watch taken to the jeweler's, or if Mr. Hurry wanted to send a deposit to the bank, or if Charley wanted a package of Turkish cigarettes he called a messenger. Then a bill was received from the messenger company for \$58, which nearly caused a dissolution of the partnership of Brisk & Hurry. The junior partner threatened to break away if Mr. Brisk did not let Charley go immediately. Mr. Brisk was willing enough to do so, but did not want to hurt the feelings of the Sopkins family by doing so. The partners were in this quandary when the object of their wrath appeared. Both applied themselves to their desks, and neither trusted himself to look at Charley. He walked up to Mr. Brisk's desk and found that gentleman scratching an inkless pen over a sheet of paper.

"I—ah—beg—your—pardon—Mr.—Brisk—but—I—don't—think—I—can—stay—here—any—longer," said Charley hesitatingly.

"Why, what is the matter, Charles?" said Mr. Brisk, coloring up as if the new clerk had learned of the trouble between the partners.

"Well—sir—I—can—stand—almost—anything—and—made—up—my—mind—

I'd—have—to—when—I—came—here—but—I—really—can't—stand—a—common—porter—calling—me—er—ah—Charley."

"Well, that is really deplorable," said Mr. Brisk; "and have you really decided to go, Charles?"

"Yes, I have made up my mind; and once my mind is made up nothing will change it."

Both Mr. Brisk and Mr. Hurry gave sighs of relief.

"Well, I'm so sorry," said Mr. Brisk, with a here's-your-hat and what's-your-hurry air. "I thought we would have a chance to make a hustling business man of you, but really I think you would make a better lawyer."

"H'm, I'm sorry you are going, too, young man," added Mr. Hurry. "I think you would make a good banker—(aside) nit."

And so ended Charley's first business experience. He is not looking for another hardware job.—Hardware Dealers' Magazine.

CATCHING A CLEVER FORGER.

Not long ago there stood before the paying-teller's window of one of New York's big banks an unctuous little fellow, smiling blandly over a \$100 cheque. Signature, endorsement, and every detail were correct. To make assurance doubly sure, the little man explained, with some insistence, "You see I had my endorsement certified."

The cheque was paid without hesitation, but the teller said to himself: "Why is that idiot standing there with such a broad grin, trying to fix his face on my memory?" And duly he took note."

A few days later, the man appeared at the window again, his countenance distended in the same smile, with another cheque from the same firm; the endorsement was certified in exactly the same way, and this time the amount was \$900. There was absolutely nothing wrong with the cheque on its face and it came from a well-known customer of the bank. "In spite of all," said the paying-teller, "something told me that fellow was a crook. So I said I should have to look up the account before it could be paid, and while he waited I slipped around to the firm's office, which was only a short distance away. The cheque was examined and pronounced perfectly good, and I was about to walk away when the head of the firm said, 'Why, hold up. We've issued no cheques this morning.' And then I went back and bagged my crook. He had first sold the firm a bond and got his original \$100 cheque in payment. This he had used to imitate the firm's signature on the second and likewise to impress me with the fact that he was all right, so that when he came around a second time I would not bother him.—From "The Working of a Bank," by C. D. Lanier, in Scribner's.

ESTABLISHED 1839.

SEYMOUR CUTLERY CO.

Successors to Henry Seymour Cutlery Co.

Office and factory . . .
HOLYOKE, MASSACHUSETTS, U.S.A.

Every pair of Seymour Shears is fully warranted,
and if found imperfect from any cause will be replaced
with perfect shears.

Manufacturers of . . .

Shears, Scissors

and . . .

Sheep Shears



All Seymour Shears are water hardened and are the best made.

No commission house is sole agent for the genuine Seymour Shears. Write for catalogue and prices.

TESTING OF GUNS AND POWDERS.

THE testing of guns is easier than that of powders; but up to a point they both follow the same lines, viz., target experiments. Practice at the target is the foundation of all knowledge of a gun's shooting qualities. By it the "pattern" or spread of the shot upon the target, which is good or the reverse, according to the number of pellet-marks the target shows, and the manner in which they are placed after every shot fired, is demonstrated. The regulation target for ascertaining the pattern is a circle of sheet iron, the diameter of which is 30 inches, the shooter firing the gun 40 yards away from the target. With this target, however, it is impossible to obtain a "selected" pattern, which is now the favorite one with gunmakers. A "selected" pattern is one that is taken from a square 4-foot target by drawing a 30-inch circle round the closest group of shot marks shown on this larger target. The 30-inch diameter target is all that is required to test the shooting of a gun that shoots true to the centre; but many guns shoot aside of the mark, and the larger target is therefore necessary for detecting any deflections. This latter target should be 4 feet square, of thin sheet iron, fastened on wood, so that the centre is on a level with the eyes. By cross-lines cut into the metal it is divided into four equal squares, with a bull's-eye $1\frac{1}{4}$ inch diameter, surrounded by a small circle 5 inches diameter, and a large circle of 30 inches diameter, the whole cost being about 20s. The small bull's-eye should be painted black, and the rest of the target whitewashed, renewable after every shot. Such a target is all that is required for obtaining the pattern made by a gun of any kind, as well as the pattern given by a powder. The process also in each case is the same. Before testing for the pattern the number of pellets in every charge of shot should be carefully counted by means of a shot-counter. Plunge the shot-counter into a basin of shot until each of its holes has been filled, return

the surplus shot into the basin, and pour the counted charge into the cartridge-case. Every charge of shot so measured is precisely the same, and without this precaution comparison of one gun with another is certain to be inaccurate. As to the powder charge, there is no necessity for such precision as to a few grains one way or the other. After one charge is carefully weighed in glass scales it is easy to procure a measure from which the charges can be accurately gauged without the trouble of weighing. For testing a twelve-bore gun the usual charge of shot is $1\frac{1}{8}$ oz. of No. 6, numbering 304 pellets, and the charge of powder $3\frac{1}{8}$ drachms of black, or 40 to 42 gr. of nitro-compounds of the older varieties, such as Schultze, E.C., S.S., or Amberite, while of the concentrated nitros, such as Ballistite, Walsrode, and Cannonite, from 26 to 35 gr., as recommended by the manufacturers. Some guns shoot best with less powder than others, and some with more, but as long as the number of shot-pellets is the same for all experiments, with one gun against another, the testing will be perfectly fair.

The best pattern for all-round shooting is that of a gun that will regularly put 140 pellets on a 30-inch circle at 40 yards, but 130 pellets is the average of a really good cylinder-gun. To get a pattern of over 130 pellets a gun must be more or less choked in the barrels. A medium choke will place 160 pellets in the circle, and full-choked guns from 200 to 230 in the same space. The latter pattern is far too close for ordinary game shooting and is sure to be patchy and irregularly placed on the target, guns making it requiring the steadiness of a rifle to hit the mark. Choke-boring is going out of fashion with gunners who have much driving to do during the shooting season. For those who do not drive a medium choke in the left barrel is still popular, the right being a cylinder. In driving, both barrels are equally used on birds which are usually near the shooter, so that there is no necessity for having the left barrel shooting a closer pattern than the right; but for all-round

shooting it is advisable to have at least the left barrel more or less choked. For the shooting of clay birds it is absolutely essential for success in scoring that both barrels be choked, the left full choked.

After the pattern, comes to be decided the subsidiary point of "spread"—i.e., the even or other distribution of the pellets over the killing 30-inch circle. When the pattern shows open spaces on one part of the target and thick clusters on the others it is called patchy or irregular, and the boring is bad. A close patch in the centre of the target, and the rest of the charge so scattered as to be useless, is also objectionable, the cluster being liable to variation with every shot fired. The pellets should all be at equal distances one from the other, though, if anything, a little closer together in the centre of the circle. The pellets are counted on the whitewash by erasing two at a time with the open end of an empty cartridge case. For accuracy a "rest" at the firing point, covered with some soft material on which to lay the gun when aiming, is very desirable.

Next comes "penetration," which is almost, though not quite, as important as the pattern. There are various methods used for ascertaining penetration, but, on the whole, the most satisfactory and conclusive is the use of brown paper pads, made for the purpose by T. Pettitt & Co., 22 Frith street, Soho, London, W., and Eley Brothers, Ltd., Gray's Inn Road, London. Messrs. Eley's new pads are to be recommended, being made of (forty sheets) stouter paper than formerly. These pads are hung up in front of the target and the charges fired at them. It is usual to consider the number of sheets punctured by at least two pellets as the measure of penetration. With Pettitt's paper pads a twelve-bore gun with $1\frac{1}{8}$ oz. of No. 6 shot (304 pellets) at 40 yards should penetrate with the two leading pellets twenty-five sheets at least, which would be equivalent to twenty-two sheets of Eley's. A penetration of twenty-three or twenty-four of Eley's sheets is distinctly good, and that of twenty-

six or twenty-seven sheets is very good. With smaller bores than twelve such good patterns and good penetration together cannot be expected, either one or other quality deteriorating. A sixteen-bore gun with $2\frac{3}{4}$ drachms of powder, or its equivalent in grains of nitro-compound, and 1 oz. of shot should penetrate twenty-one sheets of Pettitt's pad, and a twenty-bore gun with $2\frac{1}{4}$ drachms of powder, or its nitro equivalent, and $\frac{7}{8}$ oz. of shot should penetrate twenty-two sheets of Pettitt's pad or twenty sheets of Eley's. The powder-charge in all cases can be varied by 1-16 drachm until it is discovered with what amount of powder the best pattern is made, and that charge of powder should be adhered to throughout, so as to obtain the best work the gun is capable of, and to ascertain its highest shooting power. We now proceed to consider the methods adopted more particularly in the testing of gunpowders in addition to those already described for guns. Patterns and penetrations, as we have said, apply to the testing of both guns and powders, but more particularly to the testing of guns, while velocities and pressures may be regarded as tests solely applicable to powders, and therefore more difficult to ascertain, except by the use of delicate and somewhat expensive instruments.

Velocities being the more important of the two, we will first take them up. The instruments used for testing the time occupied in the passing of a charge of shot between any two given points are of various kinds; but the most generally employed is that invented by Captain Le Bonlange, which, though rather expensive, is to be found with all powder manufacturers and many gun-makers. By it the time taken by the passing of the shot is ascertained by noting the distance of the free fall of a heavy piece of metal during the interval. Two electric wires are established a fixed distance apart, so as to be broken by the shot in its passage. The current through the first wire causes the chronometer—a metal rod of some length—to hang suspended from an electro-magnet, while the current through the second wire enables the registrar, a shorter rod, to hang in a similar manner. On the firing of the shot the magnets cease to support the two rods, and they both fall, the chronometer on the breaking of the first circuit and registrar on the breaking of the second. The dropping of the registrar releases a knife, which indents the zinc tube of the falling chronometer, by which dent the velocity of the charge is ultimately measured, the higher up the dent on the chronometer the lower the velocity; while, conversely, the lower the dent the higher velocity, the shorter the time in which the shot has traveled between

the two fixed points. By means of a published scale the varying velocities registered by the Bonlange "chronograph" can be quickly arrived at. With this chronograph the readings from the instrument are in metres, not yards, and 40 metres may be accepted as equivalent to 43 yards, at which distance the average velocity of the six best-known nitro-powders is 829.44 feet per second, the highest being 872.72 and the lowest 802.72. Any record in between these two last-mentioned velocities may be accepted as fairly good.

Finally "pressures" are taken by means of an instrument called the "crusher-gauge," which can be purchased from various manufacturers, that of Cogswell & Harrison, 226 Strand, London, being as reliable as any. The crusher-gauge consists of a heavy, strong barrel, similar in shape to the barrel of a gun, but having holes bored at measured points between breech and muzzle. Tight stoppers are fixed in these holes, and above the stoppers are leaden discs kept in their places by screws. These discs are crushed between the stoppers and the screws on the firing of a charge in the chamber of the barrel, and the measure of their compression gives a basis for calculating the force exerted to compress them. Such force or pressure is usually expressed in tons per square inch, for the working out of which from the leaden discs Eley Brothers (Limited) publish a table. The most important pressures are those taken 1 inch from the breech—i.e., 1 inch from the base of the cartridge. The average pressure of the six best-known powders 1 inch from the breech is 2.14 tons per square inch, the highest being 2.74 tons, and the lowest 1.51 tons. The pressures further along the barrel are usually very much less, and towards the muzzle almost unreadable. But safety can be guaranteed by any pressures given by tests 1 inch from the breech between the two figures 1.51 tons and 2.74 tons as above. Powder pressures, however, vary from month to month with each batch of the manufactured article, and tests with the crusher-gauge become very desirable and valuable to the retailer.—Ironmonger.

INVALUABLE ACCOMPLISHMENT.

One of the most invaluable accomplishments in practical life is the art of being able to produce a document or piece of writing of any kind in a condensed form. In any profession or business it is of the first importance to know how to do this. Without expertness in it despatches and letters cannot be abstracted, cases cannot be prepared for trial, news cannot be summarized for a newspaper. Yet expertness in it is very rare, solely from lack of early training.—The Nation.

LESS ACTIVITY IN IRON.

A Chicago despatch to The N. Y. Journal of Commerce under date of June 23 says: "The western iron market is quieter than it was a week ago, sales having fallen off to some extent. Pig iron sales last week in Chicago were over 25,000 tons of both northern and southern irons, and these, added to the large sales made recently, have made the furnaces very firm in their views, so that they are not making as low prices as they have been in the two or three weeks preceding. The most important news of the week in pig iron circles is, if true, the report from New York that a syndicate has been formed, headed by Russell Sage, which has bought 100,000 tons of southern iron for delivery in the next four months, delivery to commence immediately. The price as quoted, \$5.75, is not believed to be correct. The best information to be had here is that the following prices have been shaded only slightly in this trade: No. 2 foundry, \$6.50; No. 3 foundry, \$6.25; No. 4 foundry and gray forge, \$6. It is said that the syndicate is to be enlarged and further purchases made immediately. Sales of southern irons to consumers were fully as large last week as they were the week before, and cover a large territory and a diversity of buyers.

"The general tone of the iron trade in this part of the country is much better, and is improving every week. The steel mills are selling their products very freely and, while the sales of last week were hardly up to those of the week before, buyers are coming into the market all the time, and the demand will undoubtedly continue for some time. Prices of all kinds of iron and steel are firmer, although no advances have been made in quotations. The current quotation for No. 2 foundry iron is from \$9.75 to \$10.25, for both northern and southern brands. Bars, both iron and steel, are quoted at from 95c. to \$1.05. Billets have been sold in the past week at \$15.75, and rods at \$21. There is a considerably better demand for scrap material, particularly old iron rails, and prices of these have advanced slightly in the past week. They are now held at \$11.50 to \$12."

WIRE NAILS

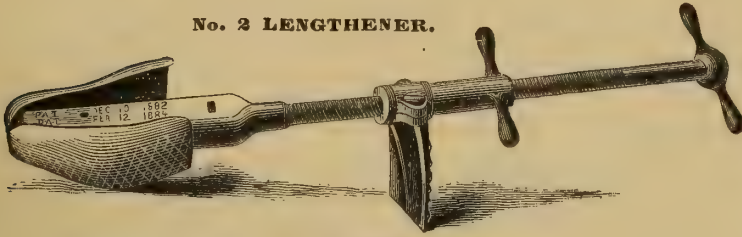
WIRE - TACKS

Ontario Tack Co.

HAMILTON

THE KNAPP & COWLES MFG. CO. BRIDGEPORT, CONN., U.S.A.

No. 2 LENGTHENER.



Boss Shoe Stretcher.

This Shoe Stretcher is made of the best Malleable Iron and Steel, and will stretch from infants' No. 4 to men's size No. 13; will stretch shoes at any point desired, and also lengthen the shoe.

Prices quoted upon application

PUTTING ON THE BRAKES.

THE arrest of motion in mechanical devices is a science. We can halt a fly wheel, stop a circular saw, bring a locomotive to a standstill, reverse the course of a steamship, and, in fact, we can put the brakes on everything but a cyclone, a scandal, the vomit of a crater, or the wheels of time. In the motion of our bodies the art of stopping is essential to our bodily safety, otherwise we might walk into a well, a tank of hot water, or a hornet's nest. When a blind man puts both his feet over the edge of a precipice, his only stopping place is at the bottom, and a hod-carrier who steps over the edge of a scaffold can call no halt on his descent to broken bones and the coroner. Now, it is a fact that while the average man knows enough to keep his fingers out of boiling water, and his hands from the tip of a live electric wire and the wrong end of a wasp, he is apt to go over the safety line, where the consequences are more serious than a fracture in his bones, or a crack in his head. How few of us know anything of putting on the brakes when the tongue runs away from truth and good sense. For reasons that are something more than anatomical the tongue is placed behind closed doors. It is also wisely endowed with the faculty of getting tired, and where nature has been generous in giving us two eyes and two ears, the dual arrangement stops at the tongue. The line is drawn on our vocal member. It is sufficient for its duty, and would seldom, if ever, put in any overtime if we knew when to put on the brakes. In business a long tongue is a misfortune. It can talk a customer to death, and is very apt to frustrate a sale by over-reaching the truth. Some men of special lingual endowments can invest a plain flat-iron with the beauty of an enamelled tile, and can cover an awl, a bodkin or a gimlet with the glory of a gold pin. This may be one of the special qualities of a salesman, but, as a rule, the man who pays for terrapin and discovers he has only secured a clam, is not

likely to repeat his mistake. An oratorical Annanias is a misfortune in any business. He may be an artist in painting sparrows and selling them for canaries, but birds of this kind generally come home to roost. Loquacity in business is as much out of place as is a bell on a cat.

In the pursuit of wealth, which, by the way, is as reasonable as climbing a tree for an apple, or digging in the earth for a potato, if we knew when we had enough of gold, or land, or houses, or mines, how few of us would be losing sleep, flesh, health, sanity and life itself in loading up our backs with more than we can carry. When we break a bottle to pour in more wine, we are not a mile away from the fever that burns in a gambler's bones, or the brain disease that afflicts a lunatic. The lust of wealth is as deadly in a man as is the lust of empire fatal to a nation. In the one case we may become a juiceless mummy in a palace, and in the other a dead Ahab among the grapes of a stolen vineyard. The inequalities of wealth that are disturbing society and sapping its foundations would never be abnormal or prodigious if men knew when to put on the brakes.

Aside from the lust of wealth, and, in fact, a vice at the opposite end of the plank, we have the man who never knows when to stop burning money. He may light his cigar with a \$100 bill, or he may be incapable of taking care of a hard-earned dime, it matters not, it is the same vice. The spendthrift is not necessarily a fool with a bank account, or a day laborer with all his belongings in a trunk. In both cases there is a leak—the one in a puncheon, the other in a keg. The one sinner may not be likely to be hungry, but the other is apt some day to be short in his rent and his bacon. Some men are worst off with most means. A few hours overtime in a week and an extra dollar will start many a man into debt. His head swells as his pocket shrinks. Unable to feed a rabbit, he speculates on a horse, and with the baker's bill unpaid for last week's bread, he brings a cake home in a

wheelbarrow. It is certain that as some men are amassing wealth by greed and cupidity, and are choking like mice in a cheese they can never consume, there are others who, by not knowing how or when to put the brakes on their spendings, are adding to the evils and the fools, of which the world in the days of Noah had enough, and the nineteenth century has too many.—Fred Woodrow, in Age of Steel.

COMPETITION.

Competition is dreaded by some merchants. Twenty years ago, remarks Merchants' Review, a tumble-down, dingy and cramped grocery store stood on a certain corner in the suburbs of this city. There was not another store within half a mile. There was absolutely no competition in sight, and yet the grocer did not appear to be making money, for his place was such, in appearance, that many people would have walked more than half a mile rather than purchase there. Since then, competition has come to that lone grocery store, which, of course, is lone no longer, it being surrounded by blocks of residences. The store itself has been remodelled, enlarged, cleaned and brightened, and to-day, with an up-to-date stock, invites the most fastidious trade. The proprietor is evidently making money, but he is anything but a victim of competition, although competition forced him to at last move with the times.

Scientific Miscellany says: When tellurium and aluminum are melted together in certain proportions they suddenly combine with a loud explosion, forming a very brittle and remarkable alloy. If this substance is dropped into water it emits a peculiar odor that is one of the most offensive known—worse than that of sulphuretted hydrogen. Chemists have been led to suspect that tellurium is not an element, but a compound of several unknown elements, and have been making efforts to break it up.

PARIS GREEN

Write For Lowest Prices.

GUARANTEED GOVERNMENT STANDARD
STOCK LIMITED

PEUCHEN & CO., 10 and 12 Bay St., TORONTO

THE HARDWARE BUYER.

By B. S. J. in Iron Age.

THE old adage that "goods well bought are half sold" was never more true than at the present.

The duties of this officer have much to do with the profit and loss account at the end of the year.

If he does his work well the results of his foresight, sagacity and judgment are easily distinguishable, while incompetence on his part will manifest itself by an accumulation of unsalable goods and meagre profits.

COURTEOUSNESS.

The first essential of a good buyer is that he should be a gentleman.

That he is not always thus considered it will only be necessary to interrogate a knight of the road in regard to certain individuals who perform this duty in some business houses.

If he is a gentleman, then the commercial travelers are sure of a courteous attention, which if they do not receive they will resent, and will not give the buyer every concession within their power, but will in many cases make him pay dearly for his boorishness.

There is nothing in commercial life that pays better returns in dollars and cents than politeness, and no one needs to cultivate this habit more than the man who does the buying.

The traveling solicitor may be too obtrusive, and his prices may not be right, yet it is wise to keep on the pleasant side of him, even if he never receives an order. The courtesy shown him will be talked about to other travelers, and it counts much to be popular with the travelers and respected by them.

To be referred to among a group of travelers as "one of the best buyers I met, and he will use you right," is a compliment that any buyer may well feel proud of.

There are no more critical judges of human nature, and none who can more readily size up a man, than commercial travelers, and their good opinion and respect are to be desired if one would buy goods at the lowest point.

DIPLOMACY.

Then the really good buyer should be as absorbent of information as is the sponge of water; but, unlike the sponge, he should retain all he knows.

If he is shrewd he can often gain information from travelers regarding rival houses which will be of advantage to him.

I do not mean by this that he should indulge in personal gossip about his competitors and quiz the traveler for this information, but some of them like to talk and he can often afford to listen.

By being on friendly terms with travelers he can acquire much information relating to his business which he could not easily obtain in any other way. The salability of other lines not carried in stock, the prospects of future changes in prices, are some of the things which travelers are supposed to know, and have no hesitation in giving the information to a friendly buyer.

STRAIGHTFORWARDNESS.

A good buyer is uniformly honest and frank with the traveler. If he is quoted a price and the price is not right he can by a little adroitness avoid letting the traveler know if he is quoting right or not.

If he has already bought it is unwise to tell the traveler his price is too high. Because then the traveler will be sure to cut his price to his next customer.

QUOTATIONS SHOULD BE KEPT CONFIDENTIAL.

It is not good buying to dicker between two parties, driving one down with the prices of the other.

Suppose a traveler gives a price on a certain article. The buyer, who knows the price at which he can buy from another house, tells him he must go lower, whereupon he quotes 5 per cent. better. The buyer does not give him the order then, but when the rival traveler calls tells him his price is too high, that he can buy at a lower figure, and can he do any better? Traveler No. 2 says he will cut the price $7\frac{1}{2}$ per cent. The buyer then goes to traveler No. 1 with the lower price and endeavors to use it in getting a still lower quotation.

The result is that he gets a still better price, and no doubt compliments himself on his shrewdness.

ONE OF THE CAUSES OF CUT PRICES.

But is this a legitimate way of doing business? We think not. And such practices as the above lie at the root of many of the cut prices and small profits on many lines of goods.

RESULT OF DICKERING.

The traveler that missed the order will then think his price too high and give a lower quotation to the next house he calls upon, and thus the cutting goes on.

One man's price should never be given to another, but should always be held in the strictest confidence, and not used as a lever to extort a lower one from a competitor.

A VISITOR FROM CHILLIWACK.

MR. J. H. ASHWELL, of the firm of Ashwell & Sons, general merchants, Chilliwack, B.C., spent the latter part of last week in Toronto. Mr. Ashwell is a British Columbian born and bred. This is his first trip to Eastern Canada, and he proposes to make good use of it. Like a sensible man he is well covering the ground. On his way down he has taken in the Kootenay country, Winnipeg, Edmonton and other intervening points of interest. It took him about a month to do this. From Toronto he went to Montreal, and from there he goes to Quebec, St. John, Halifax, Prince Edward Island, Boston, New York. He will come back into Canada again via Niagara Falls.

"The trade outlook in our part of the country," he said in conversation, "is splendid. There is now no chance of a flood, and the outlook is good for a splendid crop of everything."

"Fruits as well as cereals?"

"Yes. We shall have fruit to ship, and one of my objects in stopping over at Winnipeg was to make arrangements for shipping fruit, principally plums, there."

Speaking of the character of the farming in the vicinity of Chilliwack he said it was largely mixed, while that part of the country itself was one of the best in the Dominion, and extended about twenty-two miles with a breadth of about six miles. "I have seen nothing to beat it down this way," he said, with some pride.

Chilliwack being on the Fraser River, I queried Mr. Ashwell regarding the prospects of the coming pack.

"The prospects," he replied, "are for a large pack, this being the big-run year."

Speaking of the lumber trade Mr. Ashwell said the local mills were busily employed, and were engaged in shipping a good deal of stuff to the mining regions.

In the immediate vicinity of Chilliwack there are no mining operations going on. The nearest is at Harrison Lake, some twenty-five miles distant. "As these mines become developed," explained Mr. Ashwell, "business men in Chilliwack expect to derive a great deal of benefit from them."

Mr. Ashwell is a strong advocate of the building of a railroad through Crow's Nest Pass and on to the Coast. "It will be a good thing for our town," he declared, "for the railway must pass through it before it connects with the main line of the C.P.R."

Mr. Ashwell's father arrived in Toronto from England thirty-two years ago, and is now engaged in farming near Chilliwack. The business now known as Ashwell & Sons was started about twenty-two years ago.

A. ALLAN, President.
J. O. GRAVEL, Sec. -Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company



OF . .

Montreal
Toronto
and
Winnipeg

Capital, \$2,000,000

. . Manufacturers of the . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

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Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives



QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS

Are You Interested in GAS RANGES?

If you are, it will pay you to place an

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They will increase your Trade

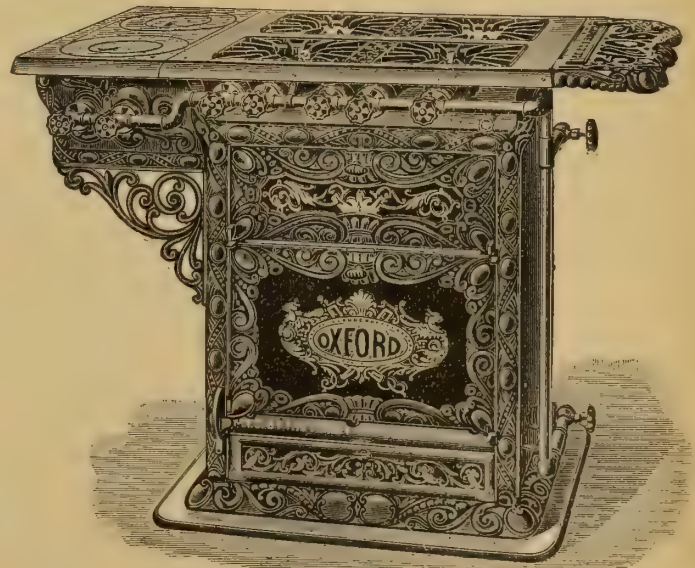
Features . . .

- Largest Oven Made.
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- Improved, Powerful Cast Iron Burner and Tube.
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- Simmering Burner with Each Range.

DRILLED OR SAWED BURNERS, AS DESIRED.

We manufacture this range with Single Oven, Single Oven and Water Heater, Double Oven (one Roasting and Baking Oven, and one Broiling and Toasting Oven), and Double Oven and Water Heater. We are the originators of this range with **BROILER OVEN ON TOP**, the convenience of which will at once be appreciated.

Send for Illustrated Catalogue and Price List.



Baking Oven, 18 x 18 x 12.
Roasting Oven, 18 x 18 x 6.

THE GURNEY FOUNDRY CO., LIMITED, TORONTO

The Gurney-Massey Co., Limited, Montreal.

SOLE AGENTS FOR THE QUICK MEAL, GASOLINE AND BLUE FLAME SUMMER STOVES.

AMONG THE RETAILERS.

*The Week's
Business.*

The extent of the business in harvest tools may be imagined when we say that one retail hardware merchant of Toronto sold 180 scythes last Saturday. Most of the retailers do not complain of the amount of goods sold, but a bitter wail over the low prices is to be heard from most of them. Canadian Paris green is this year retailing at 15c. a pound. Last year 20c. could be got and the cost was very little more than it is this year. The percentage made on screens, too, is very small.

*Tinsmithing
and Department
Stores.*

There is one line in the hardware trade, or rather connected with that, in which the departmental stores cannot or do not compete, and that is tinsmithing. The departmental stores handle goods that make quick returns, that do not require a credit system, and that do not cause much trouble. They do not touch any goods that require as much attention in putting into place, ready for operation, as they need in the shop. A tinsmith's shop is a sort of manufactory, and department stores are elaborate enough without adding such a branch. For this reason this branch of the metal trade ought to be more profitable than most branches of the business, seeing that only retail competition prices prevail. I can understand how the hardware trade in general would be injured by the departmental store, but I can't see what could affect this other line. But still I hear some grumbling. Some claim that tenders are asked for nearly every sheeting, roofing or troughing job from \$2 up, and that the prices are cut so that it is something "terrible." Well, men in business must stand competition prices, and I can't see any reason why the statements of other tinsmiths who say that trade is good and prices are fair should not be a better explanation of this year's situation—and there are merchants who do say so.

*Prefers the
Credit System.*

Most papers advocate the cash system for doing business. For that reason I think it is interesting to hear what arguments the men who still stick to the credit system have to advance in support of their action. In conversation with a hardware merchant, who is in favor of the old system, this week he gave me his reasons for not being up-to-date in this particular instance. "In adopting a cash system," he says, "first of all, some valuable trade is cut off. The merchant must then attempt to gain trade to make up for this loss. He immediately looks for bargains. As soon as a merchant introduces the bargain scheme into his business he gives his business a new reputation. He is

soon reported selling cheap goods and his trade vanishes." "Where," he says, "is the man who has succeeded in the cash business who has had as his competitor a man using the credit system? We have yearly big losses, but we are making money, which I don't think we would be doing if we abandoned our old system. We let good alone."

Signs.

A distinguishing mark of a modern business, carried on by a shrewd, reliable and up-to-date merchant, from that managed by a man who is behind the times is the display of advertising cards outside of the store or on the delivery wagons. Some merchants take the bottoms of pasteboard boxes and write the prices of their goods on them. These signs have a very bad appearance. They remind a person of the signs of Italian peddlers in the cities. It doesn't cost much to have the signs painted on good canvas or card-board, and these present a far more attractive appearance. Attention should also be given to signs of short sentences. I noticed a couple this week that struck me as being worth mention. On a wagon was the printed notice, "Our wagons go past your door." It is mild and not sentimental, but very expressive. In a window I saw the sign, "There has been a crash in prices, come in and see the ruins." I thought the metaphor was very striking. These two examples illustrate a couple of the best styles of signs.

RAMBLER.

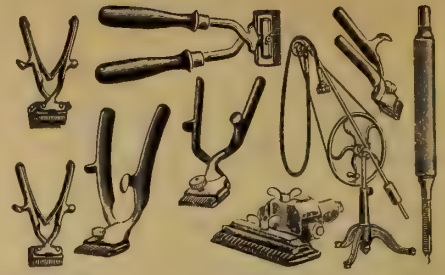
PERSONAL MENTION.

Messrs. W. Ryan and J. D. Shaw, representing H. R. Ives & Co., Montreal, were in Toronto Thursday last on business.

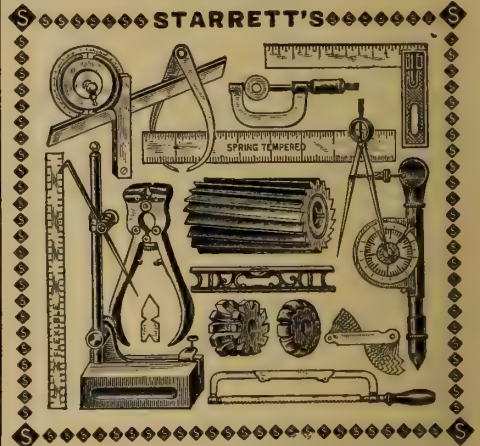
Mr. W. D. Mullett, hardware merchant, may now be seen speeding along Toronto's streets on a "Phoenix" bicycle, which he has recently acquired.

Mr. A. J. Somerville, president of the Ontario Lead and Barb Wire Co., Limited, Toronto, returned home on Friday last from a trip to Europe extending over some months. He had a pleasant time, and is looking the picture of health.

"Maxie" Morrell, city traveler for M. & L. Samuel, Benjamin & Co., Toronto, received a nasty fall from his bicycle the other day. He was pedalling along one of the main thoroughfares gracefully carrying a screen door, when his wheel slipped from under him and he was thrown off in any thing but a graceful manner. The bicycle and the screen door escaped injury, but not so Mr. Morrell, as a badly barked shin testifies. Mr. Morrell still attends to business, but he does not carry any more screen doors on his bicycle.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.



FINE TOOLS

98 Page Catalogue Free.

THE **STARRETT** CO.
L. S. Box 5
ATHOL, MASS., U.S.A.



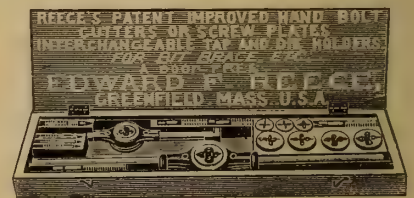
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West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.



PERSONS addressing American advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS.** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

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Cavalier and Pelham Bicycles

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Christy Saddles, Myers' Stands
Builders' Hardware, Mechanics' Tools

CUTLERY, GUNS, AMMUNITION, IRON, GLASS and WIRE.

CAVERHILL, LEARMONT & CO. - MONTREAL

... Wholesale Hardware Merchants ...

BICYCLES AT COST.

In order to clear out the balance of our stock we have decided to offer them at cost. **Phoenix**, men's and women's. **Erie**, men's only. **Jupiter**, men's only. Also Myers' Bicycle Stands and Home Trainers at cost.

Write for our figures, they may interest you.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, July 2, 1897.

HARDWARE.

THERE has been a fair week's trade in shelf hardware, but the movement of heavy material does not record much expansion. Enquiry for wire, both barbed and plain, is rather quieter than it has been. Wire nail values exhibit much irregularity, and makers have had orders taken some weeks ago during the rush cancelled this week because competitors had offered lower prices. Cut nails met a rather indifferent demand, but there have been more enquiries for horseshoes, and screws, bolts and rivets have ruled in really active request. Cutlery has met with fair attention; also guns and ammunition. Ware, hinges and leather belting also exhibit a reasonable degree of jobbing activity, while some large purchases of cement have been made by western buyers here.

BARBED WIRE—Demand is still fairly active. The nominal price is \$2.60 f.o.b. Montreal, but it is again reported that round lots can be had for less money if the buyers care to order ahead.

ORDINARY FENCE WIRE—Jobbers and retailers generally are fairly busy, but trade is not as active as it was. Discounts continue at 30 off the list 4 months, or 3 per cent. off 30 days, sales f.o.b. Montreal.

PLAIN WIRE—Very little business doing. Discounts continue at 30 per cent. on tinner's coppered iron and coppered spring, sales f.o.b. Montreal, Toronto, Hamilton and London.

WIRE NAILS—The price of these is still unsettled and makers have had orders cancelled this week because competitors had offered goods for less money. Nominally \$2 is the basis for car lots, but is well known that jobbers can easily buy at \$1.90 f.o.b. Montreal. In a jobbing way the basis is still \$2.05 to \$2.10.

CUT NAILS—Demand indifferent and values unchanged at \$1.95 f.o.b. Montreal.

HORSE NAILS—Trade is of a quiet character and prices are unchanged, discount being steady at 50 per cent.

HORSESHOES—There has been some demand for horseshoes this week, but not of an extensive character. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—Enquiry for screws continues good and prices are steady. Discounts are as follows: Flat head,

bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Unchanged.

BOLTS, ETC.—There is a good enquiry for bolts of all kinds. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—These share in the enquiry noted for the above line. Discounts on iron rivets, black and tinned, up to 2½ lbs., and all other sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There has only been a quiet business doing. We quote: Sisal, 7-16 and upwards, 5½c.; ¾, 6c.; 5-16 and ¼, 6½c., and 3-16, 7c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—Business rules quiet and prices unchanged. Discounts, 60, 10 and 10, with 4 months or 3 per cent. off cash 30 days.

CLOTHES WRINGERS—Quiet at \$29.50 to \$31.50, as to make.

ICE CREAM FREEZERS—Demand lighter for these this week.

HARVEST TOOLS—Enquiry for harvesting implements continues fair for all sorts.

SPADES AND SHOVELS—Demand continues moderate.

BUILDING PAPER—Enquiry for building paper as noted last week has ruled more active. We quote: Plain building, 30c. tarred lining, 40c.; and do. roofing, \$1.40.

LEATHER BELTING—A fairly good demand is noted. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—Preserving kettles are being asked for quite freely in enamelled and granite ware.

HINGES—There has been a good enquiry for hinges. We quote as follows: Screw hook and hinge, 6 to 10 inch, \$3.40 to \$3.50 per 100 lbs.; 12 inch up, \$2.40 to \$2.50 per 100 lbs. Discount on T and strap hinges, 70 per cent.

WIRE CLOTH—A good enquiry is noted for wire cloth and screen doors and blinds.

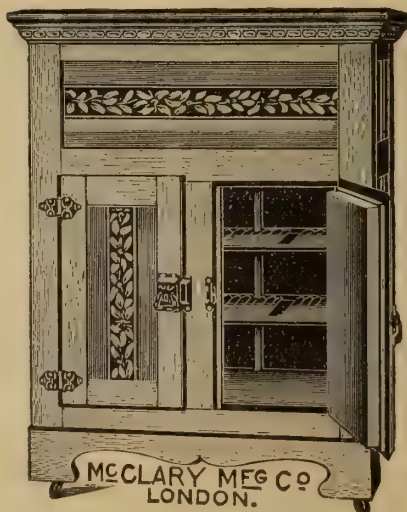
CUTLERY—Demand for cutlery is of a satisfactory character for the season.

SPORTING GOODS—Some small quantities of guns, rifles and ammunition have been asked for lately.

SHOT—Demand for this is picking up. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

CEMENT—Demand from western buyers has been quite active recently in 100 and 200

A GOOD Refrigerator



is a comfort while a poor one is not worth house room. We guarantee ours satisfactory.

Made of seasoned hardwood strongly put together and handsomely carved. Zinc lined and charcoal sheathed. Bronze locks and hinges, strong and of unique design. Ice racks and provision shelves strong and serviceable. Entire refrigerator easily cleaned.

The system of circulation, ventilation and insulation ensure a pure, dry, cold air.

Seven different sizes, with ice capacities from 25 lbs. to 180 lbs.

We have also a small quantity 1895 patterns, family size, which we will sacrifice at \$12.00 each.

The **McCLARY MANUFACTURING CO.**

London Toronto Montreal
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Cutlery...

See our new Samples for the Fall Trade. Exceptional value and best range of patterns in

**DICKINSON'S CARVERS,
GERMAN RAZORS, Etc.**

Special attention to Import Orders.

A. C. Leslie & Co., Montreal

Merchants and Manufacturers' Agents.

Portland Cement

English, Belgian, German,
American and Canadian.

Calcined Plaster

F.F.F.F.F or Dental Rock Wall and
Asbestic Wall Plaster.

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BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST
AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in
all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs,
Boxing Gloves, Punching Bags, Base-
ball Goods, Camp Sets, Folding Furni-
ture, Hammocks, etc., etc.

Send for Catalogue B.

**The Wightman
Sporting Goods Co.**

403 St. Paul St.

MONTREAL

barrel lots, both of English and Belgian, while values rule quite firm at \$2 to \$2.10 for English, and \$1.90 to \$2 for Belgian.

FIREBRICKS—Trade is of fair volume with a good demand for small quantities at \$16 to \$21 per 1,000, ex wharf.

METALS.

There has been only a quiet trade in heavy iron and metals, and no change of importance is to note except in pig lead, which is much firmer abroad.

PIG IRON—The only business of importance has been one large contract in No. 1 Hamilton pig, which was closed at a low figure. We quote: Hamilton, \$16 for No. 1, and \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$17 to \$18; Carron, \$17 to \$18; Ayrsonne, No. 1, \$16; Eglinton, \$16 to \$16.50; and Carnbro', \$16 to \$16.50.

BAR IRON—This line remains unchanged at \$1.35 to \$1.45.

BAND IRON—Continues quiet as last noted at \$1.75.

HOOP IRON—Without change at \$2.25.

SHEET STEEL—There is only a fair demand for this line while prices are easy on the basis of \$2.50.

SHEET IRON—There has been a fair jobbing call in this branch. We quote on the basis of \$2.50 per 100 lbs.

GALVANIZED IRON—There has been a good jobbing enquiry for galvanized iron, quite a few new orders coming in this week, especially from British Columbia. We quote \$4 to \$4.25.

TINNED IRON—There is a quiet trade doing at \$5.50 up to 20 gauge.

LEAD PIPE—There has been a good enquiry for lead pipe and values are steady at 7 to 7½c., with 30 and 5 off.

PIG LEAD—This shows a much stronger tendency abroad and our inside price has been advanced in consequence 10c. to \$3.35 to \$3.50, as to grade.

INGOT TIN—This article is firm at 16c.

INGOT COPPER—Dull and unchanged at 12 to 12½c.

SHEET COPPER—Was fairly active in a jobbing way at 14½ to 16c.

IRON PIPE—The unsettled tendency of values on iron pipe continues, and values are difficult to quote. However, from \$1.87 on ¼ inch to \$7.87 on 2 inch black iron pipe; galvanized, from 4c. on ¼ inch to 11½c. on 1½ inch, is a wide enough range to cover all ideas.

CANADA PLATES—Further receipts of these have induced an easier feeling in Canada plates, which we quote at \$2.30 to \$2.50 this week.

TIN PLATES—There has been no change in these. We quote: Coke I.C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I.X., \$3.90 to \$4.00; P. D. Crown, I.C., \$3.80; do. I.X., \$4.50.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Best Charcoal Rolled Iron.

B. B. Axe Horseshoe Iron.

AND FACTORIES
MONTREAL

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

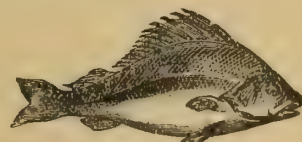
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

BOILER PLATE—Continues steady at \$1.90 to \$2.

SOLDER—Dull but steady at \$5 to \$5.25.

SPELTER—Is firmly held at \$4.50 to \$4.75.

ANTIMONY—Without change this week at 9½ to 10c.

SCRAP IRON—Some good contracts in scrap have been placed lately with local rolling mills on the basis of \$12 to \$12.50 per ton.

PAINTS AND OILS.

A steady, seasonable demand is reported in this department without special features for the week. The war in linseed oil on the American side tends to uncertainty, which interferes with sales, but this is not likely to continue. Turpentine is in fair demand for consumptive purposes without change in price. White lead is firm in view of higher prices for pig lead and an advance is expected. Red lead is firmer in tone also. Mixed paints and colors continue in active request.

WHITE LEAD—Steady, as follows: Government standard, \$5; No. 1, \$4.62½; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—Rules firmer, at 4c. in casks and 4¼c. in kegs, with No. 1, ¼c. less.

LIQUID PAINTS—In fair demand for small lots.

SHELLAC—Without change at 25c. for case lots of pale orange.

PARIS GREEN—Quiet at 13½c. in drums, and 14½c. in packets.

LINSEED OIL—Dull and unchanged. Raw, 42c.; boiled, 45c. with 5-barrel lots 1c. per gallon less.

TURPENTINE—Fair consumptive request at 42c. in single bbls., with larger lots 41c. nett.

VARNISHES—Remain as they were.

SEAL OIL—Quiet at 40c.

COD OIL—Unchanged at 31c.

NAVAL STORES—There are no new features in naval stores. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There has been little activity to report in the window glass market we quote first break, \$1.25; second break, \$1.35 per 50 feet; third break, \$2.80 per 100 feet.

ASHES.

Continue quiet at \$3 to \$3.10 for first pots, and \$2.80 to \$2.85 for seconds, with pearls \$4.40.

CHEMICALS, ETC.

Demand for heavy chemicals has been fair. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda,

67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Hides rule quiet and steady. We quote: Calfskins, No. 1, 8c.; No. 2, 6c.; beef hides, 6, 7, and 8c. respectively.

PETROLEUM.

The market is without any alteration, demand ruling very slow. We quote: Canadian, in car lots, 13½c.; smaller quantities, 14½c.; American prime white, car lots, 17c.; smaller 18c.; water white, car lots, 18½c.; smaller, 19½c.; Pratt's astral, car lots, 20½c., and smaller, 21½c.

COAL.

There has been little to report in this market. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

The total imports of Scotch firebricks to date this season have been 427,000.

The firmer feeling in pig lead abroad has been reflected here in a higher inside figure.

As a result of the firmer feeling in pig lead crushers look for higher prices in white and red leads shortly.

Arrivals of English cement to date are 10,400 casks, and Belgian 46,718 since the opening of navigation.

The linseed oil war in the United States tends to check demand in Canada, but has not influenced local prices.

There were quite large receipts of Canada plates last week, and as a result sellers are offering the goods this week at rather lower values.

ONTARIO MARKETS.

TORONTO, July 2, 1897.

HARDWARE.

TRADE is good, and better than a week ago. Some nice orders covering a general assortment of both shelf and heavy hardware have been received. Orders for harvest tools and other seasonable lines, such as freezers, churns, screen doors and windows, are large. Orders for wire nails are still heavy, and the factories throughout the country are being taxed to their utmost. A good deal of barb wire is still going out, although the demand is naturally not as brisk as it was. Enamelled ware is fairly active, although not much is being done in tinware. An improvement is to be noted in the demand for horseshoes. Trade in bolts, rivets and burrs is good. Rope shows a little more activity.

BARB WIRE—United States barb wire is being stocked in Toronto now, and a good deal of it is reported to be going out. It is quoted to retailers at about the same price as Canadian. The demand for barb wire, generally speaking, is not so brisk as it was. We quote: \$2.50 delivered to points where the rate does not exceed 25c. per 100 pounds. Terms, 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—The demand is fairly good. Discounts, 30 per cent. off the list. Terms, 4 months, or 3 per cent. off 30 days.

PLAIN WIRE, ETC.—Trade is a little better, especially in coppered spring. We quote: Tinnings', coppered iron, and coppered spring, discount, 30 per cent. f.o.b. Toronto, Montreal, Hamilton and London.

WIRE NAILS—Orders are only coming in for small quantities. We quote base price at \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—Business in this line is confined chiefly to small lots. Base price, \$1.74 Pittsburg, duty included; freight to be added; at Toronto \$1.95 is being quoted.

HORSE NAILS—Business is quiet and the discount unchanged at 50 per cent.

HORSESHOES—Trade has improved nicely, quite a number of orders having been

Binder Twine. HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

} **TWINES**

The "Eastlake" Patent Shingle

The only original shingle fastened with a cleat and having a telescopic side lock and concealed water gutter.

Beware of Cheap Imitations.



SHOWS ONE SHINGLE.

The Eastlake Shingles are made from Galvanized or . . . Painted Steel of the

Finest Quality Only.

IMPORTANT INFORMATION

When you purchase a bushel of wheat you expect to get 60 lbs., no matter what grade it is, because that is the standard weight fixed by law. There is no law saying what metallic shingles shall weigh, and the only safe rule is to demand from manufacturers of these goods a list of weights, and see that goods you buy fully come up to this.

If one maker sells you goods guaranteed to weigh 80 lbs. at \$3.20 per square, that is 4c. per lb.; if some one else offers you goods claimed to be "just the same" at \$3.00 per square, his goods may only weigh 70 lbs., and this at the same rate (4c. a lb.) should only make the price \$2.80 per square. Thus the shingles claimed to be "just the same" are 20 cents per square higher than the guaranteed goods, made by an honest maker, out of honest materials, by honest workmen.

MORAL: Deal only with honest, reliable makers, who have some reputation and capital at stake.

We believe that constant attempts are being made to deceive the public who do not happen to be judges of the various roofing and siding plates made by different makers, and we therefore wish to point out to you that the **APPROXIMATE AVERAGE WEIGHTS** of the goods made by us are as follows, **EXCLUSIVE OF THE PACKAGES:**—

THE BEST IS THE CHEAPEST	GALVANIZED "EASTLAKE" SHINGLES.			PAINTED "EASTLAKE" SHINGLES.			THE BEST IS THE CHEAPEST
	No. 1 grade,	105	lbs. per square.	No. 1 grade,	93	lbs. per square.	
	No. 2 "	94	" "	No. 2 "	83	" "	
	No. 3 "	82	" "	No. 3 "	70	" "	
BRICK OR MANITOBA SIDING PLATE.							
	No. 1 grade,	77	lbs. per square.				
	No. 2 "	68	" "				
	No. 3 "	57	" "				

All the Above Weights are Exclusive of the Packages.

We do not guarantee that all sheets are of exactly the same thickness, as it is impossible to supply all sheets exactly alike; the above weights are, however, the approximate average weight per square, so that you see exactly what we are offering you, **QUALITY, WEIGHT AND SUPERIOR CONSTRUCTION** being our first consideration. We do not aim at selling the lowest priced goods in the market, but do aim at selling the **BEST**.

Kindly take the above facts into your consideration.

We are the original makers of metallic goods in Canada, and make and sell more than all others combined.

If you want to know why, write us and we will tell you.

The Metallic Roofing Co. of Canada, Limited

Cor. King and Dufferin Sts.

TORONTO, ONT.

received the past week for both steel and iron shoes. We quote as follows: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Are going out freely. Discounts are now: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—There is not much doing. Discounts, 10 to 12½ per cent.

BOLTS—Trade is exceptionally good in this line, especially in carriage, tire and stove bolts. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ⅜ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

BRASS BUTTS—Business remains much as before. Discount, 17½ per cent.

RIVETS AND BURRS—The demand is strong, especially in coppered; tinned are not going out as freely as they were a year ago. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

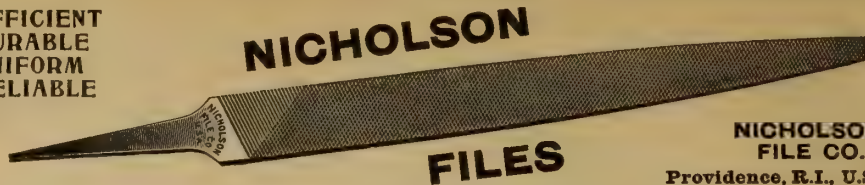
ROPE—Trade has been a little better during the past week. We quote: Sisal, 7-16 in. and larger, 5⅜c.; ⅜ in., 5⅜c.; ¼ and 5-16 in., 6⅜c.; 3-16 in., 6⅜c. Manilla, 7-16 in. and larger, 7⅜c.; ⅜ in., 7⅜c.; ¼ and 5-16 in., 8⅜c.; 3-16 in., 8⅜c.; deep sea line, 13⅜c. for water laid, and 14⅜c. for machine-made; hemp, 7 to 9c.

CHURNS—Churns are moving a little more freely than they were a week ago at this time. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Are without feature. We quote: "Lightning," \$31.50 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—The demand during the past week has increased, chiefly in hay and barley forks, scythes, snaths, grain

**EFFICIENT
DURABLE
UNIFORM
RELIABLE**



**NICHOLSON
FILE CO.
Providence, R.I., U.S.A.**

THE MARLIN MODEL 1893

Is a rifle made to give satisfaction. Like all other Marlins it has the well-known **SOLID TOP** and **SIDE EJECTION**. It is made of special stock and takes the two popular cartridges 32-40 and 38-55.



Send for complete catalogue to

THE MARLIN FIRE ARMS CO.

For Sale by all Jobbers

It is made in all lengths and styles, regular and **TAKE DOWN**.

It is also made for the 2 modern small bore high-power hunting cartridges 25-36 and 30-30 smokeless.

Barrel and Action of "Smokeless Steel."

NEW HAVEN, CONN., U.S.A.

To Whet a Scythe...

properly requires a good
Scythe Stone.

Pike's **BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively
the best on earth. **Scythe Stones**

Pike's **Lily White Washita OIL-STONE**
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

cradles and sickles. Discount, 60 and 10 per cent.

SPADES AND SHOVELS—Trade does not appear to have fallen off any since last week, a fair business being done. Discount, 45 per cent.

BUILDING PAPER—A steady trade is reported. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—Has shown quite an improvement during the week, quite a number of orders having been received during the week. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—The trade has been fairly busy during the past week in enamelled ware making up 1st July shipments. There is not much doing in tinware.

MILK CANS AND MILK CAN TRIMMINGS—The season is about over, only an odd set or lot going out.

HINGES—A nice trade is being done in these. We quote: Screw hook and hinge, 6 to 10 inch, \$3.40 to \$3.50 per 100 lbs.; 12 inch up, \$2.40 to \$2.50 per 100 lbs. Discount on T and strap hinges, 70 per cent.

CUTLERY—Business is still of a fair sorting-up character.

SPORTING GOODS—There is not much doing.

SCREEN DOORS AND WINDOWS—A few fresh shipments have been received during the week, but some difficulty is still being experienced in filling the demand.

POULTRY NETTING—Business is only fair. Discount, 67½ per cent.

GREEN WIRE CLOTH—Business is only fair. We quote: \$1.35 per 100 square feet.

GARDEN HOSE—Business continues fair. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—The conditions are much the same as a week ago. We quote in car lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.50; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

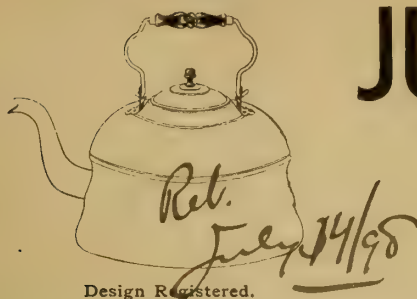
METALS.

Trade in metals is picking up a little, particularly in galvanized iron, sheet steel, black iron, terne plates and Canada plates.

PIG IRON—The little business that is being done in this neighborhood appears to be in Hamilton pig iron. We quote: Hamilton No. 1, in 100 ton lots, \$15 per

ESTABLISHED 1860

INCORPORATED 1895



JUBILEE TEA KETTLES

Made of Extra Heavy Copper, Nickel Plated.
Entirely Original Design, Beautifully Finished.

WRITE FOR PRICES.

THE THOS. DAVIDSON MFG. CO., Limited,

MONTREAL.

ton; No. 2, \$14.50; Southern soft, \$15.50 for No. 1, and \$15.15 for No. 2; Southern foundry, \$15.75 for No. 1; \$15.25 for No. 2, and \$15 for No. 3; Niagara, No. 1, \$14.80; No. 2, \$14.30.

BAR IRON—Trade is still dull. Base price we quote at \$1.40 in carload lots and \$1.50 in small quantities.

SHEET STEEL—A good trade is being done both in Nos. 1 and 2 qualities. Business during the week has been better than for some time. We quote as follows: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—An improved business is also to be noted in black iron. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Fair quantities have been shipped during the week, although there is no particular rush to note. We quote: Queen's Head (case lots), 16 gauge, 3 $\frac{3}{8}$ c.; 18 to 24, 3.75c.; 26, 4c.; 28, 4 $\frac{1}{4}$ c. Gordon Crown (case lots), 28 gauge, 4 $\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, 3 $\frac{3}{4}$ c. per lb. American (ton to $\frac{1}{2}$ -ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are $\frac{1}{8}$ to $\frac{1}{4}$ c. per lb. higher than figures named.

TINNED IRON—A number of orders are still being received, principally for the heavy gauges, although a few large-sized orders have come forward for the lighter gauges. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.13; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4 $\frac{3}{4}$ c.; extra large sizes, 6 $\frac{7}{8}$ to 7 $\frac{1}{2}$ c. per lb.

LEAD PIPE AND TRAPS—Business in both these lines has been more active during the past week. We quote: Lead pipe, 7c.; lead waste, 7 $\frac{1}{2}$ c., discount, 30 and 5 per cent.

off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—A better demand is also to be noted for soil pipe. Discount, 60 and 10 per cent.

PIG LEAD—Not much has been done in this line during the week. We quote: \$3.30 per 100 lbs. for ton lots and \$3.40 per 100 lbs. for smaller lots.

INGOT TIN—While no large sales are reported a fair amount of business has been transacted. We quote: 16 $\frac{1}{4}$ to 16 $\frac{1}{2}$ c. per lb.

INGOT COPPER—Quiet and unchanged. We quote: 11 $\frac{3}{4}$ c. for quantities and 12 $\frac{1}{4}$ c. for small lots.

SHEATHING COPPER, ETC.—A number of shipments in case lots of sheathing copper have been made during the week. In braziers' sheets the movement has been fair. We quote: Sheathing copper, 14 $\frac{1}{2}$ to 16c. according to weight and quantity; braziers', 15 $\frac{1}{2}$ to 17 $\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Trade remains fair without any further improvement compared with a week ago. We quote per 100 feet net: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ -inch, \$1.87; $\frac{1}{2}$ -inch, \$2.10; $\frac{3}{4}$ -inch, \$2.45; 1-inch, \$3.40; 1 $\frac{1}{4}$ -inch, \$4.50; 1 $\frac{1}{2}$ -inch, \$5.87; 2-inch, \$7.87. Galvanized, $\frac{1}{2}$ -inch, 4c.; $\frac{3}{4}$ -inch, 4 $\frac{3}{4}$ c.; 1-inch, 6 $\frac{3}{4}$ c.; 1 $\frac{1}{4}$ -inch, 10 $\frac{1}{4}$ c.; 1 $\frac{1}{2}$ -inch, 11 $\frac{1}{2}$ c.

RANGE BOILERS—There is a fair trade being done. We quote: Galvanized, 30 gallons, \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Enquiries for shipment from stock are more numerous; also for import. A number of orders for direct shipment have been received during the week. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$3.

TIN PLATES—Business in this particular line is not as good as it was a week ago, and can be said to be only steady. We

quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Business is without feature. We quote: $\frac{1}{4}$ in., 4 $\frac{5}{8}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—The demand is still fair. We quote: Imported, 5 $\frac{1}{4}$ c. in ton lots, and 5 $\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Stocks have been received and quite a number of shipments have been made. We quote: 1C, \$6.25 to \$6.50; 1X, \$8.

SOLDER—Trade is still fair. We quote: Standard, 10 $\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Is moving a little more freely. We quote: Cookson's, 8 $\frac{3}{4}$ to 9c.; other makes, 8 $\frac{1}{4}$ to 8 $\frac{1}{2}$ c.

GLASS.

The glass trade continues fairly good. The import orders are all in and stocks are claimed to be rather large. The tendency in glass is a rising one, and the slaughtering of prices seems about to be discontinued. Dealers all round are inclined to stiffen prices. However, quotations have not had a settled change, and there is no quotable alteration. We quote window glass: First break in 50-foot boxes, \$1.20 to \$1.25, and in 100-foot boxes, \$2.30 to \$2.40, Toronto, Hamilton and London.

OLD MATERIAL.

The demand for iron has not increased to any appreciable extent as yet, and there is really nothing doing. The trade in rags and finer metals, however, is active. Quite a considerable amount of wrought iron is being shipped to Montreal. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42 $\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7 $\frac{3}{4}$ c. per lb; bottoms, 7 $\frac{1}{2}$ c.; heavy copper, 7 $\frac{3}{4}$ to 8 $\frac{1}{4}$ c.; light scrap brass, 4 to 4 $\frac{1}{2}$ c.; heavy yellow scrap brass, 5 $\frac{1}{2}$ c.; heavy red scrap brass, 6 $\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to 3 $\frac{1}{4}$ c.; good

country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c per 100 lbs.

PAINTS AND OILS.

The business in paints and oils is rapidly declining, and dealers have prepared for the usual slack season of July and August. The trade in Paris green has disappointed the importers, as small orders only are coming in. There are no special features in the trade, and also no alteration in prices.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77½; No. 2, \$4.40; No. 3, \$4.02½; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—\$1.90 per barrel.

CASTOR OIL—In cases, 8½c. per lb. and 9c. for single tins.

SEAL OIL—Is quoted at 5½ to 6c. and yellow seal at 4¼ to 5c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

PARIS GREEN—Bulk (600 lbs.) 11c.; 200-lb. kegs, 11½c. per lb.; 100-lb. kegs, 12c.; 50-lb. drums, 12½c.; 25-lb. drums, 13c.; 1-lb. cartoons, 13¼ to 14c.; ½-lb. packages, 15 to 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 43c.; 5 to 9 barrels, 42c.; Boiled, 1 to 4 barrels, 46c.; 5 to 9 barrels, 45c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above.

COAL.

Neither the quiet of the trade nor the prices have been disturbed this week. Anthracite is quoted at Buffalo and bridges: Grate, \$4.01; egg, \$4.24; stove, \$4.24; chestnut, \$4.24.

MARKET NOTES.

A shipment of Butler's cutlery is to hand this week with H. S. Howland, Sons & Co.

A large sale of "White Mountain" ice cream freezers is reported by H. S. Howland, Sons & Co.

Mr. R. A. Baines has been appointed agent for Toronto and the east for the London Bolt & Hinge Works, and carries stock at his Scott street office.

H. S. Howland, Sons & Co. have been fortunate enough to secure another shipment of window screens. They have now also a complete stock of screen doors.

For several weeks past the Metallic Roofing Co., Limited, have been running a night gang, and now hope to catch up with all back orders by the 15th of July. The trade should place their orders early for any goods required next month.

H. S. Howland, Sons & Co. have just taken into stock a shipment of the C. T. Ham Manufacturing Co.'s "Diamond" bicycle lamp. This lamp is made on the tubular principle, the same as ordinary lanterns, the air being taken in from the top. The lamp is handsome, nickel-plated, and has a strong reflector lens. The lamp can be easily retailed at \$3.75 to \$4.

MANITOBA MARKETS.

WINNIPEG, July 2, 1897.

THERE is absolutely no change in the situation since last week. Probably early next month there will be a movement in binder twine, but just at present—to quote one of our leading hardware men—"there is a masterly inactivity about trade." We give prices as last week.

BARBED WIRE—\$2.65 per 100 lbs. base.

WIRE NAILS—\$2.50 base.

CUT NAILS—\$2.60 base.

HORSE NAILS—45 per cent. discount.

HORSESHOES—\$4 for ordinary brands, and \$4.25 for snowshoe.

SCREWS—Flat head, iron, 85 per cent.; round head, iron, 77½ per cent.; flat heads, brass, 80 per cent.; round heads, brass, 72½ per cent.

BOLTS—Carriage bolts, 60 per cent., and tire bolts, 60 per cent.

NUTS—¾ and larger, 2½ to 3c. discount.

CORDAGE—Sisal rope, 7-16 in. and larger, 6¼c. lb.; ¾, 6¼c.; ¼ and 5-16, 7¼c.; manilla, 7-16 and larger, 7¼c.; ¾, 8¼c.; ¼ and ½, 8¼c.

HARVEST TOOLS—60 and 60 and 10 per cent. discount.

BUILDING PAPER—Cyclone or Anchor brand, 60 to 65c. per roll; Cyclone or Anchor brand, tarred, 75 to 80c.

GREEN WIRE CLOTH—\$1.50 to \$1.60 per 100 square feet.

POULTRY NETTING—2-inch mesh, 60 to 65c. per 100 square feet.

BAR IRON—\$2.15 per 100 lbs.

GALVANIZED IRON—American, 24 gauge, \$4 to \$4.25; 26 gauge, \$4.25 to \$4.50; 28 gauge, \$4.50 to \$4.75.

SHEET IRON—\$3.75 to \$4.

CANADA PLATES—\$3.50 to \$4 per box.

TIN PLATES—I. C. charcoal, Allaway brand, \$4.50 per box; I.X., \$5.50; I.C., charcoal P.D., Crown brand, \$5; I.X., \$6 per box.

SHEET ZINC—6 to 7c. per lb.

WROUGHT IRON PIPE—To 2 inch 65 and 67½ per cent.; over 2 inch 67½ to 70 per cent.

LEAD PIPE—\$5.25 per 100 lbs.

PIG LEAD—\$4 to \$4.50 per 100 lbs.

SOIL PIPE AND FITTINGS—50 to 50 and 10 per cent.

PORTLAND CEMENT—Canadian, \$3.75 per barrel; English, \$4 per barrel; Josson, \$4.25; calcined plaster, \$3.25 per barrel.

WHITE LEAD—Pure, \$5.75 per 100 lbs.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, 5½c.; yellow ochre, in barrel lots, 2½c.; less than barrels, 3c.; golden ochre, barrels, 3½c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, 3½c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, 2½c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, 4½c. per lb.

SUNDRIES—Glue, S.S. in sheets, per lb., 12½ to 15c.; glue, white, for kalsomining, 15 to 18c.; stove gasoline, per case, \$4; benzine, per case, \$4; benzene and gasoline, per gallon, 50c. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$8; putty, in bladders, barrel lots, 2½c per lb., for less than barrels, per lb., 2¼c.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.50 to \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown Japan, \$1; gold size, Japan, \$1.50; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 639.
Cable "LeVesconte" Toronto.

LINSEED OIL—Raw, per gal., 50c.; boiled, per gal., 53c. in barrels; less than barrels, 5c. per gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, per gallon, 55c.; less than barrels, per gallon, 58c. An additional charge for packages for small quantities.

OILS—Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 10c. per lb.; lard oil, 70c. per gal.; tanners' or harness oil, 65c.; neatsfoot oil, \$1.20; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

ADVERTISING AXIOMS.

WHEN you see a particular style of set-up that you would like to apply to your own ad, don't bother marking type. It is quicker for you and easier for the printer if you paste a bit of that style on your copy with the words, "Follow this style."

Be natural. Be honest. Be sincere. Be all these to yourself in writing your advertising. The public will recognize these qualities; they are human and touch all and will respond all the quicker.

When you set out to prepare your ad. have a mental picture of the space you are to fill. Fill this space right, with neither too many words nor too little. The organ of casuality (as phrenologists call it) is very necessary in an ad. writer.

The perceptive faculties must be well developed in an ad. writer. He ought to grasp ideas from every source, to see points that escape the average, all of which he can utilize in his profession.

The advertising writer is like a sponge, he absorbs every idea within reach. If he does not use suggestions the moment they come to him, they are absorbed in his mental receptacle, to be fished out when occasion requires.

Get out around and among people. To be successful in advertising means not only the use of your head, but also of your legs and mouth, to hear and see what is going on in the great outside world of advertising affairs. The man that goes in a hole and pulls the hole in after him is soon forgotten, and he, poor fellow, becomes a victim of that dreaded disease, the desk habit.

The advertising writer must use his imagination. Imagination is the sun that lightens up dark places; it lends a charm to prosaic subjects. Bare facts are pills that are more easily digested when covered with a coating of a good writer's imagination.

Clearness, brevity and point are the triple virtues that the advertising writer must remember. Originality in expression, beauty in typography, and all-around nicety are

minor virtues, yet all are good, and should somehow be squeezed in the ad.

Make your sentences short; likewise your paragraphs. Remember the egg in this; it is a small affair, but very meaty, and easily digested.

It takes time to make impressions. The first appearance of your ad. may be scarcely noticed, the second noticed but not remembered, the third may make a slight impression, but the succeeding insertions impress by present and past appearances.

Take a thought and express it quickly and easily with one sentence. Treat the second the same way before you venture upon the third. Let each idea stand by itself: never intermingle or jumble them up.

Hard horse-sense is the prime requisite of an advertising man. From the first preparation of copy till its final appearance in a newspaper, this qualification is demanded.

In the average body of the average ad. small pica lower case answers very well. It makes a clean appearance, is easily read, and is used by such good advertisers as Rogers, Peet & Co. and Brill Bros., of New York.

It is not a bad plan to once in a while go around and interview the compositor or head of the composing room where your ads are set up. An interchange of ideas is mutually advantageous and welcome, and if you happen to have an extra cigar in your pocket—so much the better.

Advertising is analysis. It is an analysis of the good points of what you have to offer. Analyze your offerings carefully, bring to light all the good points, and let the full glare of publicity shine upon them.

In preparing an ad be your reporter first and editor afterward. As reporter get all your best thoughts on the subject down on paper; as editor, trim, polish and elaborate until your ad is perfect.

To write a good ad. you must have a keen interest in the goods themselves. Handle them, fondle them, get acquainted with them—consider the richness, beauty, and many attractions—then, when you have imbibed the right sort of impressions, let them flow naturally from your pen.—By A. MacDonald, in Business.

AN ELECTRICAL COMBINATION.

A working combination between the Siemens-Halske Electric Co. of America, Chicago, and the Pennsylvania Iron Works, Philadelphia, has just been effected. The former company has been for several years manufacturing electrical machinery, as dynamos, motors, generators, as well as both steam and locomotive engines. The Pennsylvania Iron Works builds heavy machinery, making a specialty of steam power engines and transmission machinery. It is expected that the company combined will be able to take work which neither could take alone, combining an electrical and mechanical business, each plant to do the work that its capabilities render it able to take care of.

PORTLAND CEMENTS

**FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING**

Large Stocks.

Lowest Prices.

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL



**ONE
DOLLAR
A
YEAR**

★
Sample
Copy
Free

★
D. T. Mallett
Publisher
271 Broadway
New York

BOOKS WORTH READING

Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets, by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from **HARDWARE AND METAL**.

Necessary Books for the Retail Grocer

By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

Any one of the above
mailed for . . .

10 cents

Address

The MacLean Publishing Co.

Toronto and Montreal

Plumber and Steam-Fitter

THE CANADIAN NATIONAL CONVENTION.

THE convention of the Canadian National Association of Master Plumbers was opened on Wednesday morning when the Executive Committee held its meeting in the parlor of the Palmer House, Toronto, to arrange for the convention proper. The committee again met on Thursday morning about 10 o'clock, after which the first open meeting was held in the Pythian Hall. Addresses of welcome to the delegates were given by the civic officials of Toronto. The delegates then marched to the grounds of the Metropolitan church where their photograph was taken. Thursday afternoon and Friday morning were taken up by the private business of the association. On Friday afternoon the delegates were driven around the city, when they inspected the various plumbers' supply houses and viewed the beauties of the city. Last night a banquet was tendered the visitors in the Palmer House. To-day the chief attraction is the annual excursion of the Toronto Society of Master Plumbers to Niagara Falls. So far the delegates seem to have thoroughly enjoyed themselves. The meetings have been very interesting and the plan of entertainment drawn up by the Toronto committee has been very successful.

Owing to the lateness in the week of some of the meetings we found it would be impossible to give a full report in this week's **HARDWARE AND METAL**, and have deemed it advisable to leave the report over till next week, when an account of the entire proceedings in detail will be published.

PLUMBERS' PROTECTIVE MEASURE

The State of Illinois has inaugurated a scheme for the protection of the plumbers of that state. A law has been passed compelling each city, town or village in the state, having a population of 10,000 or more, to have a board of examiners of plumbers, consisting of three members, one of which shall be the chairman of the Board of Health, who shall be chairman of this board, a second member who shall be a master plumber, and a third member who shall be a journeyman plumber. The second and third members shall be appointed by the Mayor and approved of by the Council,

annually, and shall be paid such sums as the authorities shall designate.

Any person desiring to engage in or work at the business of plumbing, either as a master plumber or as a journeyman plumber, shall be compelled to pass an examination of a practical and elementary nature, but sufficiently strict to test the qualifications of the candidate, which examination shall be set by this Board of Examiners. This board will be empowered to grant to the candidates certificates authorizing him to work at the business of plumbing, on his evincing his practical knowledge of plumbing, house drainage and plumbing ventilation.

The fee for a certificate of a master plumber shall be \$5, and that of a journeyman plumber shall be \$1, which sums shall be paid into the municipal treasury.

Any person violating this Act shall be subject to a fine of from \$5 to \$50 for each violation.

HALIFAX PLUMBERS TO ORGANIZE.

The journeymen plumbers of Halifax have decided to form themselves into an association. They had a meeting recently and decided to call another at an early date to organize. The journeymen plumbers claim that the boss plumbers employ too many boys. These boys, under the direction of the men, are made to do men's work, which has a tendency to reduce wages and throw journeymen plumbers out of employment. The journeymen plumbers claim that the work done by the boys is far inferior to that of the men, and as a consequence owners of houses and others are paying for inferior work. A delegation of

plumbers recently waited upon the mayor and expressed their views, and requested the mayor to see that the plumbing rules of the Board of Health are strictly enforced.

PLUMBING CONTRACTS.

The John Ritchie Heating and Plumbing Co., Ltd., have received the contract for the plumbing and hot water heating of a new dwelling for Mr. C. Armstrong, Oakville.

The Bennett & Wright Co., Ltd., report contracts for the plumbing and heating of a house for Mr. John A. McGee, Walmer Road, and also a residence for Mr. Harrison, Palmerston Avenue, Toronto. This firm have been laying some large water mains for the T. Eaton Co.

FREAK OF ELECTRICITY.

Electricity played a strange freak last week in the house at No. 77 South Eighth street, Brooklyn. The trolley lines of the Nassau railroad pass through that street. Some of the electricians were repairing the feed wire, when the wire fell to the sidewalk and grounded on a water pipe at the edge of the gutter in front of the house on the opposite side.

The heavy current passed along the water pipe into the house at No. 77 and to the second floor, where the current melted a large hole in each of the lead water and waste pipes. The water flowed out in a torrent and flooded the house, doing considerable damage to the building and its contents.—Plumbing Trade Journal.

PLUMBING NOTES.

A permit has been taken out by the Lawlor estate for the erection of a five-storey

ARMSTRONG MAN'F'G. CO.





CATALOGUES ON APPLICATION.

WATER GAS AND STEAM FITTERS TOOLS

BRIDGEPORT, CONN.

office building at the northwest corner of King and Yonge streets, Toronto, to cost \$45,000.

On Thursday evening there was a small fire at G. J. Miles' plumber shop, York street, Hamilton, the roof of the building being slightly damaged.

J. M. Purvis, of Toronto, has been granted a building permit for the erection of a three-storey brick warehouse at 666 Queen street east, to cost \$2,000.

D. Schwalm, 31 Leonard avenue, Toronto, has been granted a permit for the

erection of a pair of semi-detached brick dwellings on Leonard avenue, to cost \$1,500.

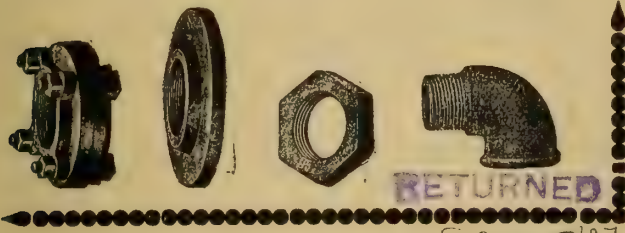
These building permits have been issued in London, Ont.: Catharine McMillan, frame cottage on lot 81, north side York street, St. Paul's survey, to cost \$670. W. Lannin, 408 Rectory street, brick veneer, one and a half storey residence, north side King street, between Glebe and Rectory, to cost \$1,000; George E. Carrothers, 192 Simcoe street, brick veneer one and a half storey residence, west side Adelaide street, between the Hamilton road and Grey street, to cost \$1,000.

COPPER BULLION FROM CANADA.

A train of eight cars loaded with copper bullion and matte from the Hall Mines, left Revelstoke, B.C., on Monday for Montreal for shipment to England. This is the first copper made in Canada, and goes high in silver and gold. Its value is about \$500 per ton.

THE "CAVALIER" WON.

The "Cavalier" bicycle has been chosen, in competition with 50 other wheels, for the use of the Montreal Police and Road Department.



Malleable and Cast Iron

Fittings

For **STEAM, GAS
AND WATER**

Complete line in stock from $\frac{1}{8}$ in. to 4 in.
Best Quality. Lowest Prices.

Mechanics' Supply Co.,

**96 St. Peter
Street, Quebec**

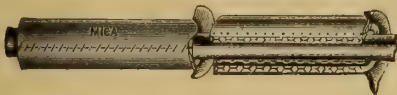
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc., H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co. Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO CANADA.

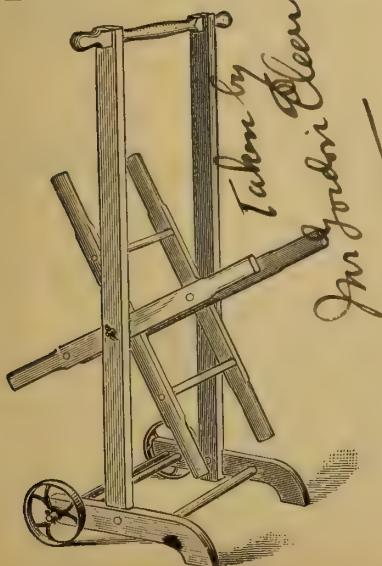
CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS
GLASS GAUGE
GASKETS, RINGS, BUMPERS.
BOILER GASKETS

**SMALL
RUBBER
GOODS**

H. O. CANFIELD - BRIDGEPORT, CT.

**MOULDED
RUBBER
GOODS**



**GARDEN HOSE, REELS,
LAWN SPRINKLERS, NOZZLES,
COUPLINGS, MENDERS, PLIERS.**

(Write for Price and Discount.)

Ontario Lead and Barb Wire Co. Limited Toronto

BRANCHES

(Hamilton Barb Wire and Nail Co.) (Western Wire and Nail Co.)

HAMILTON

LONDON

CITY VS. COUNTRY CLERKS.

SOMETHING has been said hitherto about the difference between the arrangements of the city and country stores in stoves and hardware and how the advantage is usually with the latter. As much can be said for the clerks, and occasionally for the owners, when it comes to the treatment accorded the customers. It is the usual custom to regard the city clerk, whether he sells house-furnishings or measures off tape, as one whose surroundings and trade, if not social acquaintance, enable him to learn how to deal with other people as they wish to be dealt with, courteously and intelligently. But this kind of clerk is too often missing in the city. He leaves his good manners for his personal associates, or else never had any. He treats the customer as if he were conferring a favor and displays the air of a master instead of an attendant. It may not be his fault. Possibly, he cannot help it. But his employer can help it, and generally employs stringent remedies when his attention is called to his clerk's neglect, unless he is built on the same lines and supposes he can maintain his business by disregarding his customers' wishes. In such case, the remedy is used by the customers, who discharge both his employer and clerk by withholding their patronage.

Nevertheless, there are some points about the city clerk which are preferable to those of his country brother in trade. He seldom attempts familiarity. This may not be so very much to his credit, because he does not know so many people and is not brought into such intimate relationship—hence, he does not have the same opportunities—but the fact remains in his favor, and is scored by comparison against the country clerk. There is an old saying, to the effect that too much familiarity breeds contempt. It fits some clerks exactly. They patronize their customers, and endeavor to show their superior intelligence in the selection of goods, forgetting, or choosing to ignore the fact, that the customer is not dumb nor blind and has some ideas of his own which he may wish to carry out. They take him into their confidence and attempt to demonstrate that they are the only sources of information in town, that this or the other is better than such or so, and that if the customer will only trust his selection to them he will thank them ever after for being so kind, and considerate, and wise, in picking out his goods. Then they pat him on the back, actually or metaphorically, and try to make him believe he is a jolly good fellow—like one of themselves—and that his one drawback is not in knowing quite as much as they do. Unconsciously, perhaps, they lay up on their own account a stock of contempt in

the customer's mind, while in this stock may be included the owner of the store. He pays the fiddler so that his clerk may dance.—Stoves and Hardware Reporter.

DROP IN BICYCLES.

The Pope Manufacturing Co., of New York, have decided to make heavy reductions in the prices of the Columbia and Hartford bicycles. The reduction went into effect on Thursday. The reduction will average about 25 per cent. This action of the Pope Manufacturing Co. will, it is generally believed, have a widespread and far-reaching effect. It is stated that Colonel Pope has been considering making a cut in prices for several months, and that on this account there was a long delay in getting out 1897 price lists. One of the principal reasons advanced for the cut is that sales of high-priced wheels have fallen off this season. Other manufacturers, it is alleged, have been secretly cutting prices and giving out the impression that \$100 was too high a price to pay for a wheel.

The price of 1897 Columbias has been reduced from \$100 to \$75, and that of tandems to \$125. Last year's models will sell at from \$75 to \$60; the 1896 diamond frame woman's wheel from \$60 to \$50, and the 1896 diamond frame tandem from \$125 to \$80. Hartford 1897 models, which were listed at \$75, will now list at \$50; the \$50 models at \$45 and \$40, and the 1896 Hartfords, which sold at \$50 this year, have been reduced to \$30.

The general consensus of opinion expressed by members of the bicycle trade in New York, according to The Journal of Commerce, was that a general reduction in prices was likely to follow this cut of the Pope Manufacturing Co., as it is regarded

unlikely that rival manufacturers can hope to keep up prices against the new figures of that concern.

HARDWARE DISSOLUTION.

Archibald & Sweet, hardware, Antigonish, N.S., have dissolved partnership. C. S. Archibald retires, severing all connection with the firm. Mr. Archibald writes: "I have been well pleased with **HARDWARE AND METAL**, finding it always clean, bright and interesting."

BUSINESS WANTED.

HARDWARE BUSINESS WANTED, IN A GROWING town; or would take an interest if satisfactory. Address, "Hardware Business," **HARDWARE AND METAL**, Toronto. (27)

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with Flint or Sand Papers.



SEALD TENDERS ADDRESSED TO THE undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildings," will be received at this office until Thursday, 15th July.

Specifications can be seen and forms of tender obtained, on and after Thursday, 24th June inst., at this office, where all necessary information can be had on application.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

Each tender must be accompanied by an accepted bank cheque equal to five per cent. of the amount of the tender, made payable to the order of the Honourable the Minister of Public Works, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,

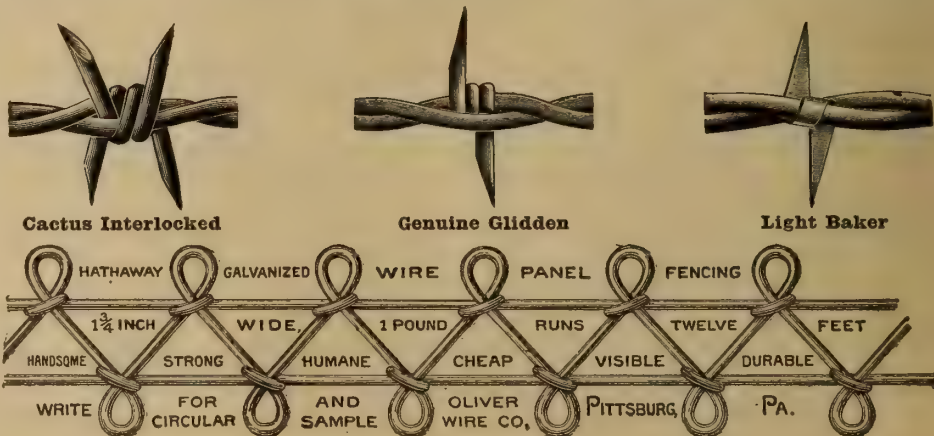
E. F. E. ROY,

Secretary.

Department of Public Works,
Ottawa, 23rd June, 1897.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (28)

BEST GALVANIZED BARB WIRE



Represented by

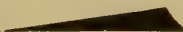
A. C. LESLIE & CO.

MONTREAL

OLIVER WIRE COMPANY

Pittsburgh, Pa.

Binder Twine

Pure Manila 
650 ft. to the lb.



BLUE RIBBON
BLUE CROWN
STANDARD

RED CAP
RED CROWN
WHITE SISAL

For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.




Consumers
Cordage Co.

MONTREAL . . .

ELECTRIC RAILWAYS IN EUROPE.

During the year 1895, the total number of electric railways, or tramways, in Europe rose from 70 to 111; the length of lines from 435 to 560 miles, and the output of the central stations from 18,150 to 25,095 kw., while the number of cars increased from 1,236 to 1,747. The mileage of electric railways in the principal European countries is as follows: Germany, 252 miles; France, 82 miles; Great Britain and Ireland, 66½ miles; Austria-Hungary, 44 miles; Switzerland, 29 miles, and Italy, 24¾ miles. Servia, Russia, Belgium and Spain have but from 6¼ miles to 18½ miles, while the remaining countries have less than 5 miles each. Of the 111 lines, 91 are operated on the overhead surface system, 12 on the underground system, and 8 by means of accumulators. It is estimated that the new lines projected for the present year will exceed in number and mileage those constructed during any previous year. Considerable activity exists in planning and laying out new routes. The capital invested in electric lines in Germany alone is estimated at \$23,800,000. German electrical companies, according to Kuhlow's Trade Review, and supply manufacturers have greatly increased in number and capital during the past few years. Berlin is about to introduce general electric locomotion in its streets, and the electric street railways in Hamburg and Leipzig are about completed.

THE RUBBER SUPPLY.

Rubber manufacturers are having their attention directed to Southern Florida as a possible source of supply of the gum, the increase in the consumption of which seems to outrun the production. The Electrical World states that the electrical industries alone demand a greater supply than was used in the world's entire rubber industry a generation ago. The necessity for new sources is fully recognized, though no immediate anxiety is felt. Doubtless there is caoutchouc in the world to meet all the demands of the present generation. The annual consumption of the crude gum is now between 60 and 70 million pounds, and about two thirds of this is supplied by Brazil. The other third comes from various parts of the topical and sub-topical world, and from time to time new fields are opened as the older ones are worked out. It is well known that the trees are sacrificed in the gathering of the gum, as the savages who are employed to gather it make no effort to save any tree after tapping, but, on the contrary, suffer it to bleed to death, thereby destroying enormous forests. If, therefore, a supply can be obtained from Florida, and if discretion and intelligence can be made to take the place of the wasteful methods of the savages, the discovery is likely to be of the utmost importance.—Trade Journals' Review.

Do you want a

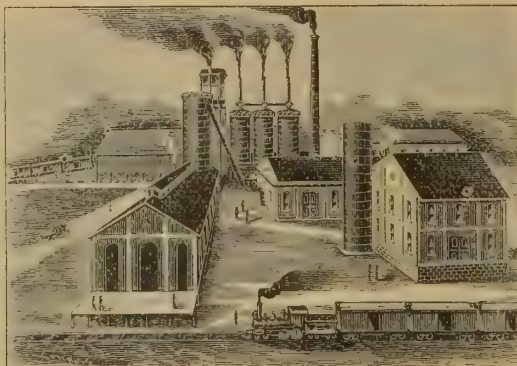
Boat Varnish**Which is Guaranteed Not to Turn White?**

If so, write us and discontinue supplying even the best grades of Carriage Varnishes for this purpose, as they are utterly unsuited.

BAYLIS MANUFACTURING CO.

The oldest manufacturers
of Varnishes in Canada

16 to 30 Nazareth Street, Montreal



The Hamilton Blast
Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

**HIGH GRADE
PIG IRON.**

Church's Potato Bug Finish

Price F.O.B. Paris

Four Barrels in first order, \$10.00; sorting-up orders at \$2.50 per barrel. Less than four barrels in first order, \$2.75 per barrel. Terms 30 days net.

CALCINED PLASTER. You can save money by getting our prices and freight rates.

PARISTONE WALL PLASTER and Land Plaster always on hand. Prompt attention to small orders as well as large.

The Alabastine Company

Limited

PARIS, ONT.

Flat Brushes that Paint

Flat Painters' Brushes that paint economically and well, because Boeckh's Patent Bridle helps them to spread the paint over the largest amount of surface in the best possible way.

Once the surface is covered it STAYS covered, and smoothly and evenly covered too. Brush can't bulge in the centre!

Send for illustrated catalogue—it will help your painters' trade.

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

CUT-THROAT COMPETITION.

THE cut-throat competition which characterizes the commercial world of to-day must be, and indeed is, deplorable to the honest tradesman, writes a Mr. Roberts in Hardwareman. One has well said, in effect, that honest tradesmen are as scarce as honest lawyers. The inference is not that most tradesmen swindle their customers, but it applies to the practice of cutting. The style in which some carry on their business can be called nothing more nor less than dishonest. So the few remarks which I make are to the honest few—those who desire competition without excessive cutting. My first act upon a fellow tradesman launching out into this system—that is, if I thought it worth my while worrying about him—would be to go to him in a friendly spirit and put sensibly before him the ruining influence of such a system, and seek to come to some mutual arrangement, suggesting that we work side by side, adopting as a business motto, "Live and let live." This, perhaps, could be done with greater freedom and success in a small place where the affected man and his cutting friend were the only two of the same trade. However, the principle will apply to a much wider extent. Of course, if he refuses to listen to my words of reason and counsel, other and more strenuous means must be used. Should the particular line which he is cutting permit, I would perforce have to bring down my price; but if, on the other hand, he is simply making the particular article a leading line, and you know, as a matter of fact, that he is absolutely losing upon its sale, then the question comes: "Am I justified, as a legitimate trader, in following suit?" My answer is an emphatic "No." I would say: "Let the man have his fling for a time"; he will soon discover that the game is not a paying one, and in nine cases out of ten he will very soon arrive at his better senses. Experience has often proved that these men do not gain their object. Their object, doubtless, is to steal the majority of the customers in the neighborhood by drawing them in this way. But the revelations of the past few years have caught the public many notches worth knowing—they are not quite so easily taught. But another matter will suggest itself; suppose your competing friend cuts not only one leading line but everything, what then is to be done? Well, it seems to me that the best course then to take would be to issue a circular intimating to the public that you make a rule to stock best quality of goods only, but stating also that, if necessity demands it, you are able to supply an inferior article at a much lower figure, putting it in such a way that the public will connect the two firms together,

and reading between the lines will steer clear of your obnoxious neighbor. The exhibition of a little business genius in this way will often work wonders. Of course, in dealing with these objectionable gentlemen a great deal of both discrimination and discretion is needed to know exactly how and when to tackle them; but, in the ordinary way, most of the business men in one place are well enough acquainted with each other to judge this after a very little consideration.

NEW SCHEME FOR PAINTING.

What people cannot do by compressed air these days isn't worth doing, it would appear. It is now proposed to paint by compressed air freight cars and anything that needs painting.

The American Engineer states that Mr. D. W. Smith outlined a scheme at a meeting

of the New England Club whereby freight cars may receive their first coat in 24 minutes and their second in 20 minutes, at less cost than if painted by hand. He stated also in his report that the operator had full control of the apparatus, and can apply a light or heavy coat as desired. He believed that the paint applied in this fashion worked into the pores of the wood better than if applied otherwise.

There are, however, some difficulties in connection with the apparatus that have to be overcome. In cold weather the paint causes trouble in the valves by freezing, and the warming of the air has to be considered, and at all times the paint has a softening effect on the hose.

Several railway companies have, however, adopted the scheme, and are working with different forms of successful apparatus.

STANLEY'S UNIVERSAL PLANE.

INCLUDING :

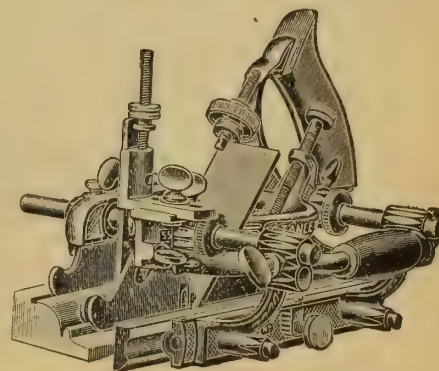
Moulding Plane, Match, Sash, Chamfer, Beading, Reeding, Fluting, Hollow, Round, Plow, Dado, Rabbet, Filletster and Slitting Plane.

No. 55. Universal Plane, \$16.00

WITH 52 CUTTERS.

The Plane is Nickel Plated; the 52 Cutters are arranged in four separate cases; and the entire outfit is packed in a neat Wooden Box.

SOLD BY ALL HARDWARE DEALERS.



INSURE YOUR LIFE IN THE CONFEDERATION LIFE ASSOCIATION

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only—that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE—TORONTO.

W. C. MACDONALD,

Actuary.

J. K. MACDONALD,

Managing Director.

THE YOUNG MAN AND THE OPPORTUNITY.

WEAK men wait for opportunities, strong men make them.

"Oh, how I wish I were rich!" exclaimed a bright, industrious drayman in Philadelphia, who had many mouths to fill at home. "Well, why don't you get rich?" asked Stephen Girard, who had overheard the remark. "I don't know how, without money," replied the drayman. "You don't need money," replied Mr. Girard. "Well, if you will tell me how to get rich without money, I won't let the grass grow before trying it."

"A ship-load of confiscated tea is to be sold at auction to-morrow at the wharf," said the millionaire. "Go down and buy it and then come to me." "But I have no money to buy a whole ship-load of tea with," protested the drayman. "You don't need any money, I tell you," said Girard sharply; "go down and bid on the whole cargo and then come to me."

The next day the auctioneer said that purchasers would have the privilege of taking one case, or the whole ship-load, buying by the pound. A retail grocer started the bidding, and the drayman at once named a higher figure, to the surprise of the large crowd present. "I'll take the whole ship-load," said he coolly, when the sale was announced. The auctioneer was astonished, but when he learned that the young bidder was Mr. Girard's drayman, his manner changed, and he said it was probably all right.

The news spread that Girard was buying tea in large quantities, and the price rose several cents per pound. "Go and sell your tea," said the great merchant the next day. The young man secured quick sales by quoting a price a trifle below the market rate, and in a few hours he was worth fifty thousand dollars. The author does not endorse this method of doing business, but tells the story merely as an example of seizing an opportunity.

There may not be one chance in a million that you will ever receive aid of this kind; but opportunities are often presented which you can improve to good advantage, if you will only act.

"You are too young," said the advertiser for a factory manager in Manchester, England, after a single glance at an applicant. "They used to object to me on that score four or five years ago," replied Robert Owen, "but I did not expect to have it brought up now." "How often do you get drunk in a week?" "I never was drunk in my life," said Owen, blushing. "What salary do you ask?" "Three hundred (pounds) a year." "Three hundred a year! Why, I have had I don't

know how many after the place here this morning, and all their askings together would not come up to what you want."

"Whatever others may ask, I cannot take less. I am making three hundred a year by my own business."

The youth, who had never been in a large cotton mill, was put in charge of a factory employing 500 operatives. By studying machines, cloth, and processes at night, he mastered every detail of the business in a short time, and was soon without a superior in his line in Manchester.

"The best men," says E. H. Chapin, "are not those who have waited for chances but who have taken them; besieged the chance; conquered the chance; and made chance the servitor."

The lack of opportunity is ever the excuse of a weak, vicillating mind. Opportunities! Every life is full of them. Every lesson in school or college is an opportunity. Every examination is a chance in life. Every patient is an opportunity. Every newspaper article is an opportunity. Every client is an opportunity. Every sermon is an opportunity. Every business transaction is an opportunity—an opportunity to be polite—an opportunity to be manly—an opportunity to be honest—an opportunity to make friends. Every proof of confidence in you is a great opportunity. Every responsibility thrust upon your strength and honor is priceless. Existence is the privilege of effort, and when that privilege is met like a man, opportunities to succeed along the line of your aptitude will come faster than you can see them.

If a slave like Fred Douglass can elevate himself into an orator, editor, statesman, what ought the poorest white boy to do, who is rich in opportunities compared with Douglass, who did not even own his body. —Pushing to the Front.

COUPON CASE IN COURT.

Judicial notice was given to Mr. W. A. Lawson's coupon system last week, when the originator of the scheme sued Mr. Taylor, butcher, Toronto, for \$25 for an alleged breach of contract. One of Lawson's agents left a book of coupons with Taylor, who, it was sworn, refused to give coupons to two customers. One of these said that Taylor's clerk told him that if he gave him a coupon, he would have to charge him a little more for his meat.

Taylor swore that he was first approached with a watch scheme, but he wouldn't go into that. He tried the coupon system, but claimed it hurt his trade, for people got the idea that he was charging more for his goods, but yet he didn't refuse to give them.

On the other hand, Mr. Crottie, a merchant in the west end of Toronto, swore that the coupons had increased his business 20 per cent.

As each party wanted another witness the case was adjourned a week. Meanwhile it is the subject of a good deal of talk around town.

The Northwest farmers are already placing orders for binding twine, one Winnipeg firm having booked \$50,000 orders.

THE PANSY WOOD COOK

COLD ROLLED STEEL OVEN

Patent Reservoir Cook Stoves
Entirely New for 1897
Elegant in Design
Perfect in Construction
Moderate in Price

New
Catalog
Out
In
July



The D. MOORE CO. Limited Mfrs. of High-Class Stoves and Ranges, Hamilton, Ont.

TRADE CHAT.

LAST week Rossland camp shipped and milled 1,585 tons of ore, which is at the rate of 80,000 tons a year. Nor is all this ore from one mine, as is sometimes charged. The product last week was from seven mines. It is claimed that the camp will come very near doubling this tonnage before the close of the present year, and will be producing it at the rate of at least 150,000 tons a year.

The local banks in Hamilton have decided to allow only 3 per cent. interest on deposits after July 15th.

The largest shipment so far of American pig iron reached Liverpool a couple of weeks ago. It consisted of 3,000 tons and went to one concern.

An undertaker who had been making extensive alterations to his store, remarked gravely to a friend: "My place looks so nice that people are just dying to come in."

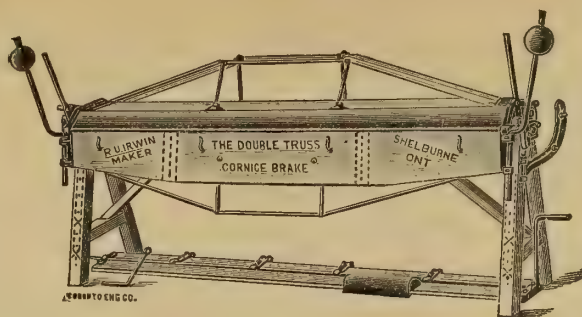
Mr. F. W. Mudge, brass finisher, formerly with the Peterborough Lock Manufacturing Co., has returned to Peterborough with his family and will become a permanent citizen. He intends starting up a new machine shop for the manufacture of specialties and repairing of all kinds.

The following are the officers of the St. Thomas Board of Trade: President, John Campbell; vice-president, John Farley; secretary-treasurer, J. W. Stewart. Council, R. Potts, W. H. King, J. Mickleborough, A. E. Wallace, J. H. Still and F. M. Griffin. Auditors, S. H. Palmer, J. McAdam.

The contractors for the Buffalo breakwater have decided to use Canadian stone in the construction of that piece of work, which is to cost about \$2,000,000, and the laboring classes in Buffalo and vicinity are passing resolutions condemning the contractors' action. The work has been in progress some months, the stone used being American. The quality of this stone proved unsatisfactory, hence the change and resolutions of condemnation.

GOLD IN THE RAND.

A further substantial improvement is shown in the aggregate gold production of the Rand district for May, reported at 248,305 ounces. This shows an increase of 12,607 ounces, as compared with April returns, and of 53,297 ounces over the figures for the corresponding month of last year. For the first five months of the current year the total production of gold reached 1,136,902 ounces, as compared with 860,863 ounces in the corresponding period of last year, when the results were diminished by the unsettlement which succeeded the raid, and with 850,115 ounces in the first five months in 1895—an increase of 276,039 ounces in the former case and of 286,787 ounces in the latter.



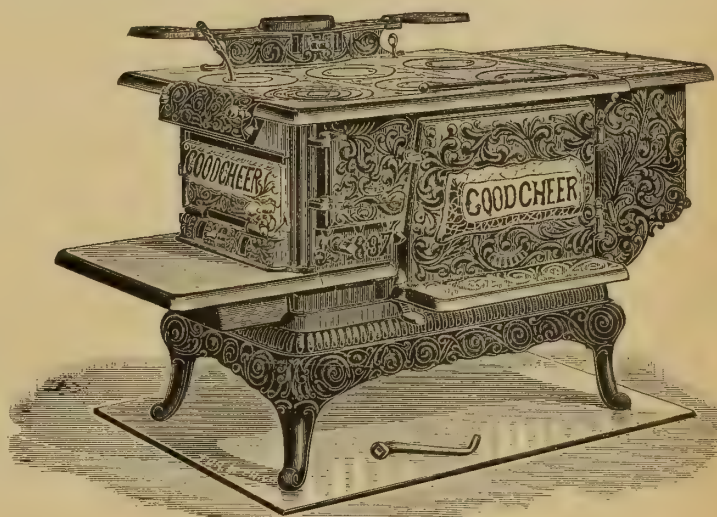
\$60 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Bearer for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

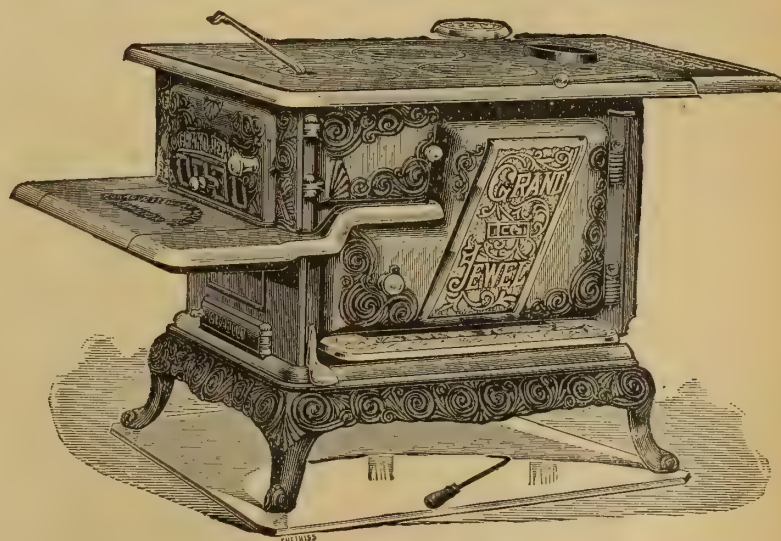
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With
Patent
One-piece
Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son,
MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

THE stock of E. R. B. Hayward, general storekeeper, Whitby, Ont., is advertised to be sold by auction under chattel mortgage 6th inst.

Louis Favreau, machinist, Montreal, has assigned to Bilodeau & Renaud.

Jas. Comfoltez, general storekeeper, St. Michel Bellechasse, has assigned.

Uriah Dodd, general merchant, Delta, Ont., has assigned to Omer Brown.

W. J. Pepper, general merchant, Shedden, Ont., has assigned to Wm. C. Coulter.

Cardiff & McLean, hardware merchants, Dauphin, Man., have assigned to John Emslie.

Wellington Kimball, general merchant, Wilkesport, Ont., has assigned to Thomas J. Gordon.

Kent & Turcotte have been appointed curators of the general store of R. Stafford, Joliette, Que.

The stock of Joseph Rousseau & Fils, tin-smiths, Quebec, is advertised to be sold by bailiff's sale on the 5th prox.

PARTNERSHIPS FORMED AND DISSOLVED.

The firm of Chevrier & Fletcher, general merchants, Rigaud, Que., has dissolved.

T. Pepper & Co., manufacturers of axles, Guelph, Ont., have dissolved partnership. Alex. Smith continues.

Baris & Roy, broom manufacturers, Iberville, Que., have dissolved partnership. Delphis Roy continues.

Damour & Dessaint, sash and door manufacturers, Hull, Que., have dissolved, Camille Damour continues.

Joseph and Simon Perrault have formed a partnership to trade in Montreal as painters under the style Perrault Bros.

The firm of H. Poirier & Fils, general merchants, Roxton Falls, Que., has dissolved. Norman Poirier continues.

Eloi Pepin and Alphonse Legault have formed a partnership to carry on a lumber business in Montreal under the style Legault & Pepin.

T. W. Robinson, general merchant, Moose Jaw, has admitted J. C. Hamilton in partnership. The style will be Robinson & Hamilton.

Edward C. Perkins and Marcus S. Taylor have formed a partnership to carry on a general business in Mansonville, Que., under the style M. S. Taylor & Co.

Thomas C. Thompson and Richard Hambly have formed a partnership to trade as marble dealers in Coaticook, Que., under the style of Thompson & Hambly.

The firm of Therrien & Co., general storekeepers, St. Remi, Que., has dissolved. Hirmas Therrien and Alexander Therrien have formed a new partnership to run under old style.

George H. Ostigny, J. Alexander Ostigny and Lewis Ostigny have formed a co-partnership to carry on a general business in Chambly Basin, Que., under the style Joseph Ostigny & Fils.

SALES MADE AND PENDING.

The stock of the Reid Co., of Toronto, Ltd, wholesale dealers in lumber, has been sold.

The assets of J. B. Laforest, general storekeeper, St. Perpetue, Que., have been sold at 61 1/2 c. on the dollar.

Valentine McDonald, general storekeeper, Port Felix, N.S., is advertising his book debts for sale by auction.

The assets of the estate of C. Schack & Co., manufacturers of show cases, etc., are to be sold by auction on the 30th inst.

CHANGES.

Jeremiah Rodgers is opening out a general business in Stanley, N.B.

M. L. McRae, general storekeeper, Port Colborne, Ont., has been succeeded by R. L. Twohey.

James Fletcher has started a general store in Rigaud, Que. The style will be James Fletcher & Co.

Nellie S. Vanfleet is registered proprietress of the lumber business of Vanfleet & Co., Brantford.

FIRES.

The premises of Louis Duhamel, carriage maker, Ottawa, have been damaged by fire. Simson Magnan has had his sawmill burnt at Point aux Trembles (Portneuf), Que.

The oil house of John Martini, hardware merchant, Oil Springs, Ont., has been burned.

DEATHS.

John W. Myers, general merchant, Canso, N.S., is dead.

W. H. Grindley, blacksmith, Yarmouth, N.S., is dead.

George W. Bradshaw, contractor, Windsor, N.S., is dead.

Samuel J. Shaw, of S. J. Shaw & Co., a hardware firm of Quebec, is dead.

CATALOGUES, BOOKLETS, ETC.

The Cooper Machine Co., Ltd., have just issued a neat little pamphlet descriptive of the "Imperial" gas and gasoline engine. The pamphlet, of itself, is a pretty piece of work. The colored lithographing is tasty and the illustrations give both the size and mechanism of the engines. The pamphlet contains a striking advertisement of the fact that one gallon of gasoline will produce one horse-power in this engine for ten hours. The engines have several commendable advantages, and can be started in less than a minute. They are also "built for hard work."

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of **10 cents**

HARDWARE AND METAL, Toronto

A TWIST OF THE WRIST
AND YOUR CHAIN'S ADJUSTED.

Wolff-American
High Art Cycles.

have the only perfect
ECCENTRIC ADJUSTMENT.

DORKEN BROS. & CO.
MONTREAL.

THE OAKVILLE BASKET CO.,

Manufacturers of

1, 2, 3 Bushel

Grain

AND

Root

BASKETS

THE OAKVILLE BASKET CO.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

HISTORY OF THE GRAPHITE CRUCIBLE.

THE following is an extract from a paper read at the convention of the American Foundrymen's Association:

Before the present century crucibles were made chiefly of sand and clay, but what we know as the modern graphite crucible, more commonly known as plumbago, or black lead, was originated in the year 1827 by Joseph Dixon, then living at Salem, Mass. So it is to the present century and to an American that the world owes this useful invention. In its broadest sense, a crucible is the vessel in which a fusion of some substance is conducted. Crucibles differ widely, according to the substance to be fused and the object of the fusion. They differ in composition, shape and size, from the tiny platinum crucible of the laboratory and the average melting pot for brass or steel melting to the 50-ton hearth of the modern steel furnace.

Crucibles are used in every laboratory and every scientific shop, but chiefly in the foundry for the fusion of metals and alloys. There are now in use in various parts of the world platinum crucibles for laboratory work, sand crucibles so-called, made from Hessian clay and sand, straight-out clay crucibles made from English clay, and the melting pot known to all foundrymen as the black lead, or plumbago, crucible, which is, more correctly speaking, the graphite crucible.

While the use of the Hessian sand crucible still lingers among assayers, and while English steel makers still cling to the use of the one-heat clay crucible, the vast bulk of all the metals and their alloys is fused in the modern graphite crucible.

As before mentioned, graphite crucibles were first made in 1827 by an American. Later the American taught the Englishman, and still later the practice travelled to France and Germany, Japan and China; and now, to the best of my knowledge, the making of the graphite crucible is confined to France, Germany, England, Japan, China and America. America, however, has taught the world.

The theory of the graphite melting pot is that, vastly better than anything else, it is a ready conductor of heat, and at one and the same time it is both strong and elastic. Again, it is refractory and durable. Being the best conductor of heat, the coal bill is minimized and quick melting made possible. Being strong and elastic, it stands all reasonable shocks and accommodates itself to radically different temperatures. Being refractory, the most stubborn metals succumb and become fluid long before the walls of the pot show the slightest sign of collapse.



VanTuyl & Fairbank
Petrolia, Ont.
Headquarters for ..
Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Ltd.

ADVERTISING DEPARTMENT

MONTREAL - - TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed
Nuts, Square and Hexagon



**BROOM AND CORDAGE
WORKS.**

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass
Work

Address—
Toronto Fence and
Ornamental Iron Works

Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelties, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL



CURRENT MARKET QUOTATIONS.

TORONTO, July 2, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.		
L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X., "	6 25	
I.X.X., "	7 50	
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	3 60
I.X., "	4 50	4 60
I.X.X., "	5 50	5 60
I.X.X., "	6 50	6 60
D.O., 12½x17	3 50	3 75
D.X., "	4 50	4 75
D.X.X., "	5 75	6 00

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 15	
I.C., special sizes	3 25	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 25	6 50
I.X., Terne Tin	8 00	
I.X., Orion	8 00	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs	0 05½	0 06
14x60, "		
14x65, "		

Tinned Sheets.

72x30 up to 24 gauge	0 06	0 06
26 "	0 06½	
28 "	0 07¼	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined "	1 80	
Horse Shoe, "	1 80	
Band "	2 25	
Hoop "	2 25	
Swedish "	4 00	4 25
Sleigh Shoe Steel "	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10½	0 11
Tank Plates, 1-5 and thicker	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½ inch	0 06½	
2 "	0 07½	
2½ "	0 09½	
3 "	0 11	

Steel Boiler Plate.

¼ inch	2 45	
½ inch	2 35	

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier.....	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 35	
26 "	2 45	
28 "	2 55	

Canada Plates.

All dull, 52 sheets	2 50	
Half polished	2 50	2 60
All bright	3 00	3 25

Iron Pipe.

Wrought, ¼ to ¾ inch, \$1.87 : ½ inch, \$2.10;		
¾ inch, \$2.45; 1 inch, \$3.40; 1¼ inch, \$4.50;		
1½ inch, \$5.87; 2 inch, \$7.87.		
Galvanized, ½ inch, 4c. ¾ inch, 4½c. 1 inch,		
6¼c. 1¼ inch, 10¼c. 1½ inch, 11¼c.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 5 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
Per lb.		
16 gauge	0 03½	
18 to 20 gauge	0 03½	
24 gauge	0 03½	
26 "	0 04	
28 "	3 75	0 04

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼ " " "	4 75	
" 5-16 " " "	4 00	
" ¾ " " "	3 75	
" 7-16 " " "	3 35	
" 1 " " "	3 25	
" 9-16 " " "	2 95	
" 1 " " "	2 85	
" ¾ " " "	2 75	
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70

Jack chain, iron, single, per doz. yards	0 13	0 50
Jack chain, double, per doz. yards	0 15	
Jack chain, brass, single, per doz. yards	0 20	10

Copper.

English B. S., ton lots	0 12½	0 12½
Lake Superior		

Bolt or Bar.		
Cut lengths, round, ½ to ¾ in. round and square	0 20	0 22
1 to 2 inches	0 18	0 19
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.		

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes	0 15	0 16½
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.		
Planished and tinned, 14x48 and 14x60	0 25	0 27

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17	0 19	
35 to 45 "	0 15½	0 16
50 lb. and above, "	0 15	0 16½
Boiler and T. K. Pitts.		
Plain Tinned, per lb	0 21	
Spun, per lb	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12½ p. c. off list.		
From 20 gauge up, 12½ p. c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c. off list.		
Best, hard-rolled, 2x4 ft.	0 20	0 00

Zinc Spelter.

Foreign, per lb	0 04½	0 04¾
Domestic "	0 03¾	0 04

Zinc Sheet.

5 cwt. casks	0 05½	
Part casks	0 05½	

Lead.

Imported Pig, per lb	0 03¾	0 03¾
Domestic, per lb	0 02¾	
Bar, 1 lb.	0 04½	
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04¾
Sheets, 3 to 6 lbs., per sq. ft., by roll.	0 04	0 04¾

NOTE.—Cut sheets ½ cent per lb. extra. Pipes, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount. NOTE.—Cut lengths, net price, waste pipe, in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half	Per lb.	Pe
Standard	0 11	0 11½
Wire	0 10½	0 11
	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb.	0 08	0 08½

Anti-Friction Metal.

'Beaver' brand	Per lb.	
	\$0 20	

White Lead.

Pure, Assoc. guarantee, ground in oil, 25 lb. irons	Per cwt	
No. 1 do	5 15	
No. 2 do	4 77½	
No. 3 do	4 40	
No. 4 do	4 02	

Brandram's B. B. Genuine	3 65	
" Decorative	6 25	
" No. 1	5 35	
" No. 2	4 65	

f.o.b. Halifax, St. John, Montreal, Toronto

James' genuine	6 50	
" No.	6 00	

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French "	0 05	
Marine Black	0 09	
Green	0 09	
Chrome "	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe	1 35	1 40
Yellow Ochre (J.F.L.S.) bbls.		
per cwt	2 75	
Yellow Ochre (Royal), per cwt	1 10	1 15
Venetian Red (best), per cwt	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	
Umber, "	0 10	
do. aw	0 09	
Drop Ochre, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03¾	
Ultra marine Blue in 28-lb. res, per lb.	0 08	

Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks	0 13½	
50-100 lb. kegs	0 14	
25-lb. Irons	0 14½	
1-lb. Boxes	0 15	

Sulphate of Copper.

Casks, for spraying, per lb.	0 04¾	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)		
No. 1 Furniture, per gal	0 65	
Extra "	0 90	
Brown Japan "	0 65	
Brown Japan, Turpentine, p.g	0 85	
No. 1 Carriage, per gal	1 30	
And ex. No. 1 Carriage	1 60	
Gold Size Japan, per gal.	1 00	1 20
Pure Orange Shellac	1 85	2 20
Hard Oil Finish	1 10	
Oil Shellac	1 20	
White Shellac	2 25	

Linseed Oil.

Raw, per gal. net	0 41	
Boiled, per gal. net	0 44	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net	0 41	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 08½	
Small lots	0 09	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
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Glue.

(In bbls.)		
Common	0 07¾	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatin	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear	0 09	
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent. Amer.		
Central Fire Cartridges, pistol sizes, Dom. 30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.		
Shot.		
Canadian, common, 17½ per cent.		
Brass Shot Shells, 55 and 10 per cent		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.			
per lb						Nail			
Best thick white felt wadding, in ½-lb bags,		1 00		Annex, per doz		1 25	1 75		
Best thick brown or grey felt wads, in ½ lb. bags,		0 70		Mascott, "		1 35	1 85		
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges		0 99		Erminie, "		1 12	1 20		
Best thick white card wads, in boxes of 500 each, 10 gauge		0 35		Blind and Bed Staples.					
Best thick white card wads, in boxes of 500 each, 8 gauge		0 55		sizes, per lb				0 7½	0 12
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges,		0 20		Bolts.					
Thin card wads, in boxes of 1,000 each, 10 gauge		0 25		Carriage, dis., 70 p.c. off new list					
Thin card wads, in boxes of 1,000 each 8 gauge				Tire, dis., 70 and 5 per cent.					
Chemically prepared black edge grey cloth wads, in boxes of 250 each—		Pe M		Stove dis., 70 and 5 per cent.					
11 and smaller gauge		0 60		Elevator, dis., ¾ to 40 per cent					
9 and 10 gauges		0 70		Machine, dis., 70 p.c.					
7 and 8 gauges		0 90		Coach Screws, dis. 77½ p.c.					
5 and 6 gauges		1 10		Boring Machines.					
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—				Complete, with augers, each..				5 00	7 50
11 and smaller gauge		1 15		Braces.					
9 and 10 gauges		1 40		Barber's				6 00	7 75
7 and 8 gauges		1 65		Barber's Ratchet				10 00	11 00
5 and 6 gauges		1 90		Farmers'				2 00	2 75
				Illar's Falls				15 50	29 00
				Brackets.					
Anvils.				Shelf.					
Per lb.		0 10	0 12½	Japanned Canadian, per doz.					
Anvil and Vice combined, each		4 50		pairs				0 50	3 40
Wilkinson & Co.'s Anvils, lb. 0 09½				Berlin Bronze Canadian				0 85	3 20
Wilkinson & Co.'s Vices, lb. 0 09½			0 10	Broilers.					
Augers.				Light, dis. .65 to 67½ per cent.					
Gilmour's, discount 65 per cent.				Reversible, dis., 65 to 67½ per cent.					
Hollow Stearn's, per dozen ..		13 00	20 00	Vegetable, per doz., dis. 37½ per cent.					
Adjustable Stearn's, each ..		5 50	6 50	Henis, No. 8, "				6 00	
Post-hole, Vaughan's, each ..		1 35	1 60	Henis, No. 9, "				7 00	
Excelsior, Jennings', discount 50 per cent.				Queen City "				7 50	10 00
				Butchers' Cleavers.					
Awls.				From 8 to ch, per doz.				4 23	
Sewing, per gross		0 65	1 59	Butts.					
Pegging, "		0 65	1 25	Brass.					
Brad, "		0 85	1 60	Wrought Brass, dis., 17½ p.c. revised list.					
handed, per gross		3 60	30	Cast Iron.					
Saddlers, per gross		0 45	1 60	Loose Pin, dis. 70 per cent.					
Awl Hafts.				Wrought Steel.					
Patent Peg, oss		7 25	8 00	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.					
" Sewing, per gross. }				Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.					
Awl and Tool Sets.				Berlin Bronzed, dis. 70, 70 and 5 per cent.					
Miller's Falls, per doz.		2 80	3 30	Gen. Bronzed, per pair				0 40	0 65
				Can Openers.					
AXES.				Acme, per gross				9 00	10 00
Splitting Axes		5 25	5 50	Sardine Scissors, per doz ..				3 75	4 50
Chopping Axes—				Card.					
Black Prince		7 25	7 50	Horse, per do				0 60	1 00
Forest Clipper		7 25	7 50	Carpet Stretchers.					
Lance		8 50	9 00	American, per doz				1 00	50
Mann's		8 00	8 25	Bullards, per doz				6 50	....
Maple Leaf		9 50	10 00	Carpet Sweepers.					
Hand Made		7 50	7 75	Bissell, per doz				22 50	
Climax		8 00	8 25	World, "				21 75	
Phantom		8 25	8 50	Daisy, "				24 00	
Axle Grease.				Star				18 00	
Per gross		6 00	13 00	Crown Jewel, per doz.				29 00	
				Grand Rapids, "				24 00	33 00
Bath Tubs.				Cartridges.					
Zinc, discount		3 90	4 0	(See Ammunition.)					
Copper, discount, 40 and 10 p.c. off revised list				Castors.					
Steel clad, 20 per cent. discount.				Bed new list, dis. 55 to 57½ per cent.					
Boxing extra				Plate, dis. 55 to 57½ per cent.					
Bells.				Cattle Leaders.					
Hand.				Nos. 31 and 32, per gross				8 50	9 50
Brass, 60 per cent.				Cement.					
Nickel, 55 per cent.				Canadian, Portland				2 50	
Door.				English				2 75	
Gon		5 50	8	Belgium				2 50	
" Peterboro', discount 50 per cent.				Canadian hydraulic				1 10	
Cow.				Figures are for carload lots.					
American make, discount 66½ per cent.				Chalk.					
Canadian, discount 45 and 50 per cent.				Carpenters' Colored, per gross				0 45	0 75
Farm.				White lump, per cwt				0 60	0 65
American, each		1 25	3 00	Red				0 05	0 06
House.				Crayon, per gross				0 14	0 18
American, per lb		0 35	0 40	Chisels.					
Bellows.				Socket, Framing and Firmer.					
Hand, per doz.		3 35	4 75	American, dis. 75 to 77½ per cent.					
Moulders, per doz.		7 50	10 00	Canadian, dis. 50 and 10 per cent.					
Blacksmiths', discount 60 per cent.				Tanged firmer, per doz				0 85	4 00
Belting.				Churns.					
Extra, 40 and 10 per cent.				Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.					
No. 1, leather, discount 60 per cent.				Steel, net.				3 00	
Standard, 55 per cent.				Clamps.					
Agricultural, 65 and 10 to 70 p.c.				Judds, dis. 20 per cent.					
Bench Stops.				Stearn's, per doz				3 00	10 00
Per doz		5 00	6 00	Clips.					
Bits.				Axle dis. 65 per cent.					
Auger.				Coffee Mills.					
Gilmour's, discount 65 and 5 per cent.				Bo				3 60	13 00
Excelsior, discount 60 per cent.				Side				3 60	4 00
Rockford Common, 65 to 65 and 5 per cent.				Enterprise, No. 0				1 35	
" Perfection, 50 and 10 per cent.				No. 2				70	
Jennings' Gen., net list to 5 p.c. discount.				Compasses, Dividers, Etc.					
Car.				American, dis. 62½ to 65 per cent					
Gilmour's, 47½ to 50 per cent.									
Expansive.									
Clark's, per cent.									
Excelsior, 10 per cent.									
Gimlet.									
Clark's, per doz		0 65	0 90						
Diamond, Shell, per doz ..		1 00	1 50						
Nail and Spike per gross		2 25	5 20						

KNIVES.			Wood, fancy Canadian or American, 37½ to 40 per cent.		
Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.			Bailey's (Stan. R. & L. Co.), 50 per cent.		
Christie, \$7.00 net.			Miscellaneous, dis. 25 per cent.		
Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.			Bailey's Victor, 25 per cent.		
Lightning, per doz. 6 50 8 40			PLANE IRONS.		
Heath's, 52½ p.c.			English, per doz. 2 00 5		
LADLES.			PLIERS AND NIPPERS.		
Melting, per doz. 1 70 4 50			Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.		
LEMON SQUEEZERS.			Button's Imitation, per doz. 5 00 9 00		
Porcelain lined, per doz. 2 20 5 60			German, per doz. 0 60 2 60		
Galvanized, " 1 87 3 85			PLUMBS AND LEVELS.		
King, wood, " 2 75 2 90			R. & L. Co., dis. 70 and 5 p.c.		
" glass, " 4 00 4 50			POPPERS.		
A glass, " 1 20 1 30			Corn, square, per doz. 1 35 2 00		
LINES.			PRUNING SHEARS.		
Fish, per gross. 1 05 2 50			Per doz. 4 00 5 50		
Chalk, " 1 90 7 40			PULLEYS.		
LOCKS.			Hothouse, per doz. 0 55 1 00		
Canadian, dis. 50 p.c.			Axle, " 0 22 0 33		
Russell & Erwin, per doz. 1 75 7 50			Screw, " 0 27 1 00		
Cabinet,			Awning, " 0 35 2 50		
Eagle, dis. 27½ to p.c.			PUMPS.		
Padlock,			Rumsey or Canadian cistern, 60 p.c.		
English and Am., per doz. 0 50 6 00			Pitcher spout, 70 to 70 and 5 p.c.		
Scandinavian, " 1 00 2 40			Canadian cistern, 60 p.c.		
Eagle, dis. 15 to 17½ p.c.			Canadian pitcher spout, 70 to 70 and 5 p.c.		
MACHINE SCREWS.			PUNCHES.		
Iron and Brass.			Saddlers, per doz. 1 00 1 85		
Flat head, discount 25 p.c.			Conductors, " 9 00 15 00		
Round Head, discount 20 p.c.			Tinners' solid, per set. 0 00 0 72		
MAGNOLIA METAL, ETC.			" hollow, per inch. 0 00 1 00		
Magnolia Anti-Friction Metal, per lb. 25			PUTTY.		
No Name Metal, " 18			Bladder, per lb. 1 75 0 17½		
Mystic Metal, " 08			Tins, lbs. 2 50 2 75		
F. O. B. New York or Chicago.			RAIL.		
MALLETS.			Barn door, per foot. 0 02½ 0 02½		
Tinsmiths', per doz. 1 25 1 50			Sliding door, " 0 03½ 0 03½		
Carpenters', hickory, per doz. 1 25 3 75			Lanes, " 0 02½ 0 02½		
Lignum Vitae, per doz. 3 85 5 00			RAKES.		
Caulking, each 1 60 2 00			Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.		
MATTOCKS.			Wood, 25 per cent.		
Canadian, per doz. 8 50 10 00			RAZORS.		
American, 60 and 10 p.c. off list.			Geo. Butler & Co.'s, per doz. 8 00 13 00		
MEAT CUTTERS.			Boker's, " 7 50 11 00		
Enterprise, American, dis. 30 to 32½ p.c.			Wade & Butcher's, " 3 60 10 00		
German, 15 per cent.			Arbenz's, " 9 00 18 00		
MINING KNIVES.			Theile & Quack's, " 7 00 12 00		
American, per doz. 0 42 2 35			RAZOR STROPS.		
MOLASSES GATES.			Currier's, per doz. 1 25 3 60		
Stebbin's Patent, dis. per cent., 77½ per cent			RIVETS AND BURS.		
NAILS.			4 mos. or 3 per cent. cash 30 days		
Cut Nails (Iron). Basis—50 to 60 dy. \$1.74			Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.		
Pittsburg, duty included, or \$1.95 f.o.b.			Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.		
Toronto, Hamilton, London.			Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.		
Cut Nails (Steel). Add 10c. to the prices in list for iron nails. 10-keg lots freight prepaid to maximum of 25c. per 100 lbs.			Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.		
Wire Nails, basis, \$1.83 Pittsburg, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburg is less than carload lots does not exceed 2½c.; other places where rate is higher, excess added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.			Black M. Rivets (Norway Iron) 60 p.c.		
Brads and moulding nails, 80 p.c. from new list.			Copper Rivets & Burs, 50, 10 and 5 p.c. dis. in ½-lb. boxes and cartons, 1c. per lb. extra, net.		
NAIL PULLERS.			Burs, iron or steel, 55 and 5 per cent.		
German and American. 1 85 50			Terms, 4 mos. or 3 per cent. cash 30 days.		
NAIL SETS.			RIVET SETS.		
Square, round, and octagon, per gross. 3 38 4 00			Canadian, dis. 35 to 37½ per cent.		
Diamond, " 12 00 15 00			ROPE.		
NETTING.			7-16 in. and larger, per lb. 5½ 00 7½		
Poultry, 67½ per cent.			¾ in. " 5½ 00 7½		
OIL.			½ and 5-16 in. " 6½ 00 8½		
Canada refined oil (Toronto). 0 16 0 16½			Russia Deep Sea " 15 17		
Carbon safety " 0 18 0 00			Jute " 00 13		
Canada w. w. " 0 18 0 00			RULES.		
American w. w. " 0 00 0 21			Boxwood, dis. 80 and 5 to 10 p.c.		
Pratt's Astial. " 0 00 0 22			Ivory, dis. 37½ to 40 p.c.		
OILERS.			SAD IRONS.		
McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50			Mrs. Potts, per set. 0 60 1 00		
Zinc and tin, dis. 50, 50 and 10.			" N.P., per set. " 90		
Copper, per doz. 1 25 3 50			SAD HEATERS.		
Brass, " 1 50 3 50			Dome, Shepard's, per doz. 4 75 5 00		
Malleable, dis. 25 per cent.			SAND AND EMERY PAPER.		
PAIS.			B. & A. sand, 40 and 5 to 45 per cent.		
Galvanized, per doz. 2 25 3 30			Emery, per quire. 0 55 0 90		
PENCILS.			SASH CORD.		
Dixon's, per gross. 1 00 4 25			Per lb. 0 22 50		
" Carpenter. " 2 25 3 60			SASH LOCKS.		
PICKS.			Triumph and Morris, dis. 37½, 40 per cent.		
Per doz. 6 00 9 00			Shells, dis. 40, 62½ per cent.		
PICTURE NAILS.			Canadian, dis. 45, 50 per cent.		
Porcelain head, per gross. 1 65 3 00			SASH WEIGHTS.		
Brass head, " 0 40 1 00			Sectional, per 100 lbs. 1 40 1 50		
PIPE CUTTING MACHINERY.			Solid, " 1 25 " "		
Forbes Patent Die Stocks.—Curtis & Curtis, Mfrs., Bridgeport, Conn.			SAWS.		
No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00			Crosscut, McMillan & Haynes, per dozen 0 40 0 70		
No. 38 Hand Machine, range 1½ to 4. " 100 00			" Empire, McMillan & Haynes, " 0 00 0 70		
No. 56 Hand Machine, range 2½ to 6. " 175 00			Hand, Disston's, dis. 12½ to 15 p.c. S. & D., 40 to 40 and 10 per cent.		
PLANES.			Crosscut, Disston's, per ft. 0 35 0 55		
Wood, bench, Canadian dis. 55 per cent., American dis. 55.			S. & D., dis. 35 p.c. on Nos. 2 and 3.		
			Hack, complete, each. 0 75 2 75		
			frame only. 0 00 0 75		
			SAW SETS.		
			" Lincoln, McMillan & Haynes, per doz. 0 00 7 50		
			Whiting, " 6 87 7 00		
			SCALES.		
			Gurney Scales, 50 p.c.		
			B. S. & M. Scales, 50 p.c.		
			Champion, 60 per cent		

PEARSON'S
PATENT

Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2½ to 48 inches.

The Montreal Roofing Co.

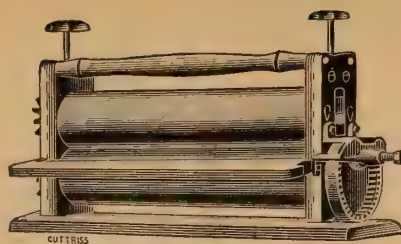
Sole Manufacturers for the Dominion, Montreal



"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
— Longfellow.

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WISH THUS TO BUILD
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TORONTO
will bring you
tenders from the
best contractors



THE IMPROVED DOMESTIC MANGLE

Something new and good—**INTERNAL GEAR**—strong and convenient—meets all ordinary requirements—is not expensive—should be in every home. Buy before the hot weather arrives. Send for samples and prices.

The Dowswell Manufacturing Co.

Limited
HAMILTON - ONT.

CHARLES F. CLARK,
President.

EDW. F. RANDOLPH,
Treasurer

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY,
Executive Offices Proprietors.

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The Bradstreet Company is the oldest and, financially, the strongest organization of its kind—working in one interest and under one management—with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

TORONTO OFFICE.

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THOS. C. IRVING, Superintendent

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON MONTREAL.

BRAND "C.I.F." THREE RIVERS
PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

Brushes

Catalogue
for

1897

Now Ready

MEAKINS & CO. 313 St. Paul Street . . MONTREAL

and Meakins & Sons, Hamilton.

Round Bottom Indurated Fibreware Fire Pails



Where no fire brigade exists they are an absolute necessity.

As assistants to the fire brigade they are invaluable.

The E. B. EDDY CO.

Limited

HULL, QUE.

Est. 1863

Inc. 1895

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

Awarded
By **JURORS** at
International Expositions
Special Prize

Gold Medal at Atlanta, 1895

WE WANT TO HEAR.



WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

The Largest and Best Trade in the Line

It is comparatively easy to get testimonials when you ask for them, but when they are sent unsolicited they prove to us that our goods are giving the right kind of satisfaction.

Among many others our customer in Aylmer, Mr. Conn, writes: "I believe by advertising your Ready Mixed Paints I have gained for myself the largest and best trade in the line."

We have to thank all those who have volunteered their recommendations, as well as all our friends for their patronage, as they have made this the busiest season of our experience.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, Toronto

Telephones 819, 1511 and 1292.

THE PAINT MAKERS

Excellent Anti-friction Metal.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, JULY 10, 1897

No. 28



MAGNOLIA
METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

LONDON OFFICE—40 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.
MONTREAL OFFICE—

Caverhill, Learmont & Co.
General Dominion Agents.

Owners and Sole Manufacturers,

266 and 267 West St., New York

Your Jobber Sells It.

Most leading jobbers carry **Queen's Head** Iron in stock. If yours doesn't, he can get it from the stocks carried by the makers in the country. Don't allow other brands to be substituted. If you give a special import order you can always depend on prompt shipment.

You can buy **LOWER-PRICED** iron, but you can't buy **CHEAPER**.

Largest Radiator Manufacturers under the British Flag.

THERE ARE OTHERS.
BUT HAVE YOU TRIED

"Safford"

QUEEN OF

Radiators

The only Screwed Nipple Radiators made in Canada for Hot Water and Steam Heating. Once tried, need no further advertising.

MANUFACTURERS AND INVENTORS

THE

TORONTO RADIATOR MFG. CO. Limited
Toronto, Ont.



RICE LEWIS & SON

(LIMITED)

ARTHUR B. LEE, President.

A. BURDETT LEE, V-P. and Treas.

Importers of

Bar Iron, Steel
Boiler Plate

SHELF AND HEAVY

HARDWARE



Mantels

Grates

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CUTLERY

FINE BUILDERS' HARDWARE.

Cor. King and Victoria Streets,

TORONTO

Anything in....

Copper

THE range of our product is from the smallest article possible to make to the largest work ever used or required.

COPPER WORK

made to any desired specification or design.



We have always on hand a large stock of

Sheet Copper and
Copper Tubing

CORRESPONDENCE SOLICITED

THE BOOTH COPPER CO.

Limited.

TORONTO

The Slick Oil Can

PATENTED 1896.

Advantages . .

A Lantern or Lamp can be filled in the dark easier than by the ordinary Can, as it is impossible to overflow.

**NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP**

The pump is attached in the simplest and strongest manner possible.

Will not get out of order with ordinary use.
A Strong, Perfect Can, at a Low Price.



KEMP MANUFACTURING CO.

Toronto



HARDWARE AND METAL

Vol. IX.

MONTREAL AND TORONTO, JULY 10, 1897

No. 28

J. BAYNE MacLEAN, President.
HUGH C. MacLEAN, Sec.-Treas.

THE MacLEAN PUB. CO.
Limited

Fine Magazine Printers

and

Trade Newspaper Publishers

TORONTO:

MONTREAL:

26 Front St. W.

Board of Trade Bldg.

Telephone 2148.

Telephone 1255.

John Cameron, General Subscription Agent.

Major A. G. Campbell, General Subscription Agent.

NEW LIST ON PLAIN WIRE.

THE DOMINION WIRE COMPANY, Limited, have issued a new plain wire list which went into effect on July 1st. As it will be a basis, some comparisons with their list issued on April 1st last are interesting. In the April list the subdivisions were as follows: Bright, Annealed, Oiled and Annealed, Coppered, Coppered Spring, and Galvanized. These are replaced in the list just issued as follows: Bright, Annealed, Coppered, Galvanized, and Tinned. The following is a comparison of the list as it stands with the old:

	Bright		Annealed		Coppered		Galvanized		Tinned	
	New	Old	New	Old	New	Old	New	Old	New	Old
6 & 7	2.80	2.70	2.80	2.50	3.1	3.10	3.20	3.15	.....	.....
8	2.6	2.6	2.60	2.6	3.1	3.10	3.20	3.15	5.75	.....
9	2.65	2.65	2.65	2.7	3.15	3.15	3.20	3.00	5.75	.....
10	2.7	2.7	2.7	2.80	3.25	3.25	3.2	3.15	6.00	.....
11	2.80	.8	2.8	2.9	3.4	3.4	3.40	3.10	6.0	.....
12	3.0	2.95	3.00	3.0	3.5	3.5	3.6	3.25	6.5	.....
13	3.2	3.0	3.20	3.1	3.75	3.75	3.8	3.75	6.5	.....
14	3.4	3.15	3.4	3.10	4.0	4.0	4.0	3.9	6.5	.....
15	3.7	3.35	3.35	3.5	4.0	4.20	4.25	4.20	6.8	.....
16	3.65	3.6	3.65	3.9	.....	5.3	5.30	6.7	.....	.....
17	3.8	.8	3.8	4.0	.....	5.5	5.50	6.9	.....	.....
18	4.0	4.0	4.1	4.0	.....	5.7	5.7	7.0	.....	.....
19	4.25	4.25	4.5	1.5	.....	6.0	6.00	7.0	.....	.....
20	4.45	4.45	4.5	4.6	.....	.....	.....	7.4	.....	.....

From Nos. 21 to 34, Bright Weaving and Binding, the old and the new lists are identical.

The extras in the April list were as follows:

EXTRAS—NET

	Per 100 lbs.
Special Hay Baling Wire.....	25 cts.
Best Steel Wire.....	65 "
Bright Soft Drawn.....	15 "
Charcoal (Extra Quality).....	\$1.00 "
Packed in Casks or Cases.....	15 "
Bagging and Papering.....	10 "
50 and 100 lb. Bundles.....	65 "

ANNEALED WIRE NOS. 17, 18, 19 AND 20.

	Per 100 lbs.
In 25 lb. Bundles.....	10 cts.
In 1 lb. Hanks.....	50 "
In 1/2 lb. ".....	75 "
In 1/4 lb. ".....	\$1.00 "

WIRE GAUGE NOS. 6 TO 16.

	"B. B.".....15c. per 100 lbs. over Plain Galvanized Wire.
Galvanized Telegraph and Telephone.	Ex. "B. B." Charcoal, \$1.15 per 100 lbs. over Plain Galvanized Wire.

HEAVY STRAIGHTENED WIRE.

In Bundles, cut 10 to 12 ft. long (not exact)

SIZE,	7-16	3/4	5-16	1/4	3-16 inch.
-------	------	-----	------	-----	------------

Prices will be quoted on application.

LIGHT STRAIGHTENED WIRE.

Cut to Special Exact Length.

Size of Wire.	Over 20 in. Long	10 to 20 in. Long	5 to 10 in. Long
Gauge No.	per 100 lbs.	per 100 lbs.	per 100 lbs.
0 to 5	\$0.40	\$0.60	\$1.00
6 to 9	0.75	1.00	1.50
10 to 11	0.90	1.50	2.00
12 to 16	1.00	2.00	3.00

In the list recently issued they are:

EXTRAS—NET

	Per 100 lbs.
Oiled Wire.....	45 cts.
Special Hay Baling Wire.....	75 "
Best Steel Wire.....	65 "
Bright Soft Drawn.....	15 "
Charcoal (Extra Quality).....	\$1.00 "
Packed in Casks or Cases.....	15 "
Bagging and Papering.....	10 "
50 and 100 lb. Bundles.....	65 "
In 25 lb. Bundles.....	10 "
In 1 lb. Hanks.....	50 "
In 1/2 lb. ".....	75 "
In 1/4 lb. ".....	1.00 "

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6 to 9	0.50	0.75	1.50
10 to 11	0.75	1.00	2.00
12 to 16	1.00	1.50	3.00

The jobbing trade allow a discount of 30 and 5 per cent. off this, f.o.b. Montreal, in Quebec, and the same discount in Ontario, with an allowance of 20c. for freight,

CANADA'S GREATEST PROBLEM.

THE problem that Canada has to solve is the railway problem. It transcends all others. Important as is the tariff question, it is second in importance to that appertaining to the railway system of the country.

Canada's pride in her system of railways is not unpardonable. For a country of five millions of people, sixteen thousand miles of railway is something we need not be ashamed of.

But while we have no reason to be ashamed of the extent of our railways we have reason to be ashamed at the fact that our precautionary measures for the control of these railways have not kept pace with the expansion of these highways of steel.

The fact of the matter is, that while we have been congratulating ourselves, the railway people have taken the reins out of our control until they are now, to all intents and purposes, our masters instead of our servants.

How to get back what we have lost is the problem which now awaits solution. And woe be it to the business interests of the country unless we do solve it.

The subsidies which the railways have secured, and the peculiar privileges which they enjoy, came from the hands of the people of this country. These subsidies and privileges were given, not for the benefit of these railways, but for the benefit of the districts through which these railways run.

Railway corporations, it is well known, do not possess the quality of gratitude. But what gratitude would not give, justice should have demanded. But Justice has been asleep. Or rather, members of Parliament

with passes in their pockets have refused to allow Justice to unsheath her sword.

And the result of this is, that to-day the two great railway systems of the Dominion are conferring favors upon foreign manufacturers at the expense of the home manufacturers.

In many instances freight will be carried from a manufacturing point in the United States five or six hundred miles away to a delivery point in Canada at several cents per hundred pounds below the figure that is demanded for carrying the same goods from a shipping point in Canada three or four hundred miles nearer.

Only a few days ago a well-known manufacturer in Canada received an order from Vancouver for a certain line of goods. As far as the quotable price was concerned, he was quite able to compete with the manufacturers of similar lines in the United States, but when he applied to the railway for a rate he found that it was so high that it precluded the possibility of his filling the order from his own factory.

Not to be outdone, the manufacturer in question placed the order with a manufacturer in Louisville, Kentucky, and getting a rate thirty-three cents lower per hundred pounds from that point to Vancouver than he could have had had he made the goods in his own factory and shipped them from Toronto.

The distance from Louisville to Vancouver we do not know, but a glance at the map shows that Toronto has the advantage of distance.

As the rate asked from Toronto was 90c. and that from Louisville 57c., it is obvious that the Canadian manufacturer in freight alone was handicapped to the extent of over 36 per cent.

This is a most disgraceful state of affairs. It cannot always go on. It must not always go on. But the end of these things will only come when the people of this country arise and say they shall no longer be.

The first essential is a permanent railway commission, composed, not of politicians, but of men known for their integrity, independence and business capability. Such a commission, backed by judicious and efficient laws, would, in time, greatly alleviate the anomalous conditions from which Canadian shippers are now so severely suffering.

DECLINE IN BARB WIRE.

THE BARB WIRE ASSOCIATION is no more. Its dissolution took place on Friday last at a meeting of its members, held in Toronto.

With the dissolution of the association has also come a reduction in price of about 30c. per 100 pounds, the ruling figure now being \$2.20, Toronto, Montreal, Hamilton or London. No delivery is now made, customers paying freight.

Up to the time of going to press the representatives, in Toronto, of the United States factories have made no change in prices, \$2.25 f.o.b. still being their figure.

The Iron Age of July 1, in its report of the Pittsburg market, said: "The domestic demand for barb wire is very dull at the present time, but some of the mills are regularly receiving good sized orders for export, principally to Canada. After January 1 next barb wire will be admitted free to Canada, and it is expected that the greater part of the demand from that country will be supplied by the United States. Prices on barb wire are weaker and lower, and we quote at \$1.60 for 4-point galvanized in car-load lots at mill."

CUT NAILS LOWER.

A reduction has taken place in cut nails during the week, the base price being \$1.85 per keg, a decline of 10c. per keg. This price is f.o.b. Toronto, Montreal, Hamilton and London, with the usual rebate to hardware dealers.

The fact that there was a greater difference than usual between the price of wire and cut nails is one of the reasons for the reduction.

SLIGHT CHANGE IN TACKS.

A slight change has been made in the discount on tacks. Assorted cut tacks, quarter weights, 4 to 14 ounce, are now quoted at 45 per cent.; 4 to 10 ounce, 50 per cent.

PRICE OF LINSEED OIL AND TURPENTINE OPEN.

After having been regulated for about seventeen months, the price of turpentine and linseed oil is again an open one. This is due to the defection of two large dealers in Toronto.

So far, the price is nominally unchanged, and dealers state that while there are no fixed

figures, cutting prices will be abstained from.

Turpentine has declined about one cent and a half per gallon in the primary market during the last two weeks, and is now at the lowest point it ever touched. Much the same may be said in regard to linseed oil.

It is difficult to see how, in view of these facts, present figures can be maintained.

MANITOBA THE ARBITER.

ALTHOUGH commercially or in point of population not as important as many other provinces composing the Dominion, Manitoba has come to be looked upon as, to a great extent, the arbiter of the trade of the country.

"If the crops in Manitoba fail woe be to us," is the cry of the business men in Canada, and especially those in Ontario.

And while the importance thus given to Manitoba may be greater than is warranted, yet the prosperity of the Dominion depends a great deal upon the prosperity of that province.

It is quite reasonable, therefore, that business men in the east should watch with a great deal of interest the development of the crops and the dairying and stock-raising industries of that province.

As far as the present outlook is concerned the conditions are assuring. The crop area is from 10 to 20 per cent. larger than a year ago, and not only is the area larger, but the weather has so far been of a most favorable character. Then, as to the cattle trade, it is expected to show an increase. The same is to be said of the dairying industry. The fact, too, that a market for Manitoba flour is being opened up in Australasia and China is not by any means to be treated lightly. Then there is the benefits which are to be derived from the extension of the cold storage system. This must eventually prove a great boon to the Prairie Province.

Aside altogether from the agricultural conditions of the province, there are the healthier business methods which obtain. The business men in Manitoba have learned by experience the evils of both long credits and reckless buying, and are gradually turning their footsteps into the pathway which they have learned to be the right one.

If it be true that Manitoba be the trade arbiter of the Dominion, it is evident better times are in store for us.

NEW FILE LIST.

A NEW list has been issued by the file manufacturers. On mills, tapers and the other staple lines prices have been advanced. In some lines there has been an advance of from 10 to 20 per cent., but, generally speaking, there does not appear to have been a material appreciation in values. The discounts remain as before.

The manufacturers claim that the advances have been only made on such sizes as had hitherto been turned out at a loss. The chief advances are in the very small sizes.

Some changes have been made in the classification, flat and square files now being listed separately. Warding files are also separated from hand and pillar files.

It is nearly twelve years since the list was last revised and it had in the meantime become somewhat antiquated.

WANT A HARDWARE VALUATOR.

The Montreal Metal and Hardware Association at a meeting held last Friday decided to urge upon the Government the appointment of an official hardware valuator.

The association as a body have no com-

plaint to make regarding the appraisers at the different ports, who they feel are thoroughly competent men. It frequently happens, however, that importations of hardware at one port come in under a lower valuation than at another. This, without doubt, is a decided injustice to importers at the latter port.

The Hardware Association believe that the appointment of the official they recommend, whose duty it would be to secure a uniform valuation, would do away with this discrimination.

A LAW FOR SHOPKEEPERS.

A N Act of some interest to business men was passed during the recent session of the Ontario Legislature. It is entitled "An Act Respecting Shops and Places other than Factories."

The purpose of the Act is to regulate child and female labor in shops. The word "shop" is defined as "any building or portion of a building, booth, stall, or place where goods are handled, or exposed or offered for sale, and any such building, portion of a building, booth, stall or place where good are manufactured, and to which

the Ontario Factories Act does not apply." All the provisions of the Act it is not our purpose to give. Our purpose is merely to refer to those provisions which are of most interest to the mercantile community.

The employment of children under ten years of age is prohibited, while no child, young girl or woman shall be employed in or about any shop before the hour of seven in the morning and after six o'clock in the evening, except on Saturdays or the day before a statutory holiday, and from the 14th to the 24th day of December inclusive. For female employees the Act declares that seats shall be provided.

Clause 13 stipulates that shop owners shall, if the inspector so determines, provide eating rooms for their employes, and clause 14 provides for ventilation and sanitation of the shops.

The penalty for contravention of the Act in the particulars mentioned ranges from \$10 to \$25.

These are times when governments are becoming more and more solicitous for the well-being of employes, and it is quite proper they should. But it is to be hoped they will not forget that there are also employers who have interests to be safeguarded. Such a thing is quite within the range of possibility, however.



Iver Johnson Revolvers

Iver Johnson Cycles . .

*Send for our Catalogues and Prices
They will interest you*

Honest Goods

at

Honest Prices

IVER JOHNSON'S ARMS AND CYCLE WORKS

Fitchburg, Mass., U.S.A.



Plumber and Steam-Fitter

NATIONAL ASSOCIATION OF MASTER PLUMBERS.

The Annual Convention in Toronto — Four Days of Business and Pleasure — 'Twas a Most Gratifying Success — Joseph Wright elected President, W. Smith Vice-President, and W. Mansell Secretary.



PLUMBERS for four days last week held possession of the city of Toronto. It was the occasion of the second annual convention of the National Association of Master Plumbers' of Canada. Never before was there such a foregathering of master plumbers, not only in Toronto, but in any other place in Canada. With one exception every important city in Canada from Halifax to Winnipeg was represented.

The arrangements both for the business proper of the convention and for the entertainment of the delegates was excellent and those to whose forethought and energy it was due are certainly entitled to a great deal of credit.

The business of the convention may be said to have begun on Wednesday, June 30th, when the Executive Committee was in private conference the greater part of the day.

The convention proper began on Thursday morning, July 1, in the Knights of Pythias Hall, Queen and Victoria streets. It was just 10.30 o'clock when President Lamarche, of Montreal, ascended the dais, gavel in hand, and turned to the assembled delegates with the remark: "Gentlemen, we will now call the meeting to order. I have much pleasure in calling upon Mr. Briggs, of Montreal, to act as sergeant-at-arms."

The applause which greeted this nomination was an evidence of its popularity.

President Lamarche: Our first duty is now the appointment of a committee on credentials, and I have much pleasure in appointing Messrs. W. H. Heard, of London; W. H. Dunbrack, of St. John, N.B., and A. Forrest, of Quebec. These gentlemen will please examine the credentials from all the gentlemen present and report the same.

The credentials were quickly gathered and scrutinized and the committee reported the following delegates present:

QUEBEC.—R. Sampson, A. Forrest, J. R. Kane, J. O. Matte, A. Pickard.

MONTREAL.—Thos. Moll, E. C. Thibault, J. W. Harris, John Watson, P. C. Ogilvy, Arthur Martin, P. J. Carroll, E. C. Mount, Wm. Briggs, J. W. Hughes, Joseph Lamarche.

WINDSOR, ONT.—M. B. Squires.

HALIFAX.—John Borton, Geo. A. Perrier.



The New President—Joseph Wright.

OTTAWA.—John McKinley, F. J. Johnson.

ST. JOHN, N.B.—W. H. Dunbrack, J. H. Doody.

ST. CATHARINES.—J. A. Caslake.

TORONTO.—J. B. Fitzsimons, Joseph Wright, A. Purdy, H. Beavis, J. K. Allison.

WINNIPEG.—J. W. Hughes.

LONDON.—W. H. Heard, W. Smith, E. Holland, Benjamin Noble.

WEST TORONTO JUNCTION.—Represented by the five Toronto delegates.

ST. THOMAS.—W. Flaherty.

PETERBOROUGH.—Adam Hall.

There were thirty-four delegates present against eighteen last year at the first convention. The representation was one delegate to every ten members.

Among the visiting plumbers present

were: B. Noble, London; Chas. T. Bull, St. Thomas; M. B. L'Hereux, Windsor, and a number of members of the Toronto association.

A great deal of amusement was occasioned by the entry of the New York delegate. It came in on the coat tail of Mr. Anthes, of the Toronto Foundry Co. It was a yellow kid in paper card-board and written across it were the words: "Ise de New York delegate of this convention. See!" During the remainder of the convention the "delegate" was pinned to the back of the president's chair.

WELCOMING THE WHOLESALERS.

President Lamarche: Before going further, gentlemen, I guess it will please the members of this convention if I welcome here the wholesale gentlemen and manufacturers who have honored us with their presence. You all know of the amicable relations which have existed between the wholesale men and ourselves; and their presence here is an indication of their willingness to co-operate with us in the future as they have done in the past. (Applause.)

President Lamarche: I believe the next order should be the appointment of a committee on resolutions. There will be a good many resolutions, and if we refer them to a committee the work of the convention will be proceeded with in a much quicker manner than would otherwise be possible. I would suggest a committee of five.

Vice-President Burroughes moved that a committee of five be appointed. This was seconded by Mr. A. Martin, of Montreal, and carried. The president named as a committee on resolutions Messrs. Joseph Wright, Toronto; J. W. Harris, Montreal; J. H. Doody, St. John, N.B.; R. Sampson, Quebec, and W. Smith, London.

President Lamarche: Gentlemen, if you have any motions to put before the meeting now is the time you should do it in order that the committee may have some work to do between now and this afternoon. Motions amending the constitution will go to this committee. The chairman of the committee is Mr. Wright.

Mr. P. J. Carroll: Would it not be well, Mr. Chairman, for you to deliver a few remarks in French?

President Lamarche: It is usual, I understand, to carry on the business of this asso-

ciation in both English and French, but I believe that the Frenchmen present understand English. It would, therefore, save time by using only the English language. Of course, if you say different we will have to carry on business in the two languages.

Mr. Thomas M. Moll: As we all understand English I think it would save time in carrying on business in that language only.

This remark, coming from a Frenchman, was greeted with hearty applause.

NOTICES OF MOTION.

The following notice of motion was submitted to the association by Mr. William Smith, vice-president for the province of Ontario:

I hereby place before you as a notice of motion a plan which, if adopted, would, I think, place us on a more solid foundation, and also place us in a better and easier working form.

1. That there be a set of what shall be known as the supreme officers, to be composed of the president, the vice-president, treasurer and secretary and sergeant-at-arms.

2. That each province be formed into what shall be known as the Canadian Master Plumbers' Association of the Province of —, the said association to be composed of all the locals in the said province and the officers of same to be comprised of a president, a first vice-president, a second vice-president, a secretary and a sergeant-at-arms.

3. That the local association be formed as at present, only their representatives would be elected to attend the provincial convention instead of the Dominion, as at present.

4. That at each provincial convention, which would be held once a year, there be three representatives elected to attend the supreme convention, which would also be held once a year.

5. That we have a chart, which shall be issued by the supreme power, and that all locals now formed be supplied with one of them; that each local be managed under the number system. The said chart shall always remain the property of the Dominion association.

6. That we issue a certificate of membership and that each member of the local association be supplied with one, a tax to be put on each local for what it requires. Should a member withdraw from the association or be expelled for any cause, the said member shall forfeit his certificate.

7. Should any local association cease to exist, its chart shall be surrendered to the Dominion association.

8. That a seal be procured and adopted by this Dominion association.

Moved by E. C. Mount, seconded by J. W. Hughes, that the following changes be made in the constitution and bylaws;

Article 1, page 20, after the words "plumbers" add "and steamfitters." Article 4, page 21, erase the words in the third line "at or" 1st meeting in May and substitute "next convention." Bylaws, article 7, add to fourth line after the words "convention" the words "unless otherwise decided by the convention," and article 17 to bylaws which shall be the order of business. "Montreal Resolutions." To amend the interpretation of the term "master plumber" so as to include steam and hot-water fitters.

Foregoing is extract of the minutes of

PARIS GREEN

The only green we sell is Berger's Green. It's made by Lewis Berger & Sons, Limited, London, England. The reason we sell it is because we believe it to be the best brand of Paris Green made. It has enjoyed this reputation for very many years. We are the sole wholesale selling agents for Berger's Paris Green in Canada.

Bugs are lively now. The season is late and the demand will continue later this season than usual. Give your trade the best and surest green made. Orders by wire or mail for any size package promptly shipped.

THE SHERWIN-WILLIAMS CO.

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

meeting of sub-committee of Executive held June 1, 1897.

Both resolutions were referred to the Committee on Resolutions.

REPORT OF EXECUTIVE COMMITTEE

MR. PRESIDENT AND GENTLEMEN,—Your committee have pleasure in submitting their annual report to the second convention for the year ending June 30, 1897.

Three meetings of the Executive Committee were held during the year, one immediately after the close of the first convention in Montreal, one in Quebec City on the 22nd of January, 1897, and one in Toronto on the 30th of June.

The meeting in Quebec was called after mature deliberation and much correspondence, and was rendered necessary by the accumulation of business which it was impossible to bring to a satisfactory conclusion by writing. Much good resulted from the calling of the committee together, members in Quebec being stimulated and encouraged. The final adjustment of the difficulties so long existing between our association and the Toronto Dealers' and Manufacturers' Association and the securing of the signatures of the Quebec wholesale dealers to our resolutions. At the first meeting of the Executive Committee, a sub-committee with power was appointed, consisting of President Lamarche, E. C. Mount, and J. W. Hughes. This committee has met regularly throughout the year, and the work accomplished will, we hope, meet with your

approval. Forty-six meetings were held for the despatch of business, besides a number of conferences, of which no special note has been kept, and would strongly recommend the continuance of the practice of appointing a similar committee. During the year local associations in affiliation with the Dominion Association have been organized in the following towns: Winnipeg, Windsor, Stratford, St. Thomas, and St. Catharines. Negotiations are now going on that will, we hope, result in the formation of an association in Vancouver, B.C.

We regret the apathy shown by some of the larger cities, from whom we hoped for cordial sympathy and assistance. A number of towns are still unorganized, among them being the following important cities and towns: Hamilton, Goderich, Brantford, Ingersoll, Woodstock, Guelph, Berlin, Collingwood, Galt, Brockville, Niagara, Belleville and Owen Sound, in Ontario; Sorel, Sherbrooke, Three Rivers, in Quebec. We would urge that special efforts be made in order to get these towns enrolled. We desire to express our appreciation of the efforts made by Vice-president Smith, of Ontario, in organization work. Considering the undoubted benefits to be derived from organization, it is surprising that there should be any master plumbers willing to remain outside the ranks of their organized confreres.

Your executive would strongly urge the necessity of delegates impressing upon their local associations the desirability of the members working upon and treating the association as an integral part of their busi-

ness organization, and to look upon the money spent in keeping up an organization as a paying business investment. We recommend the convention to consider the advisability of making a fixed annual charge instead of present practice of making regular per capita tax calls on the members. The whole respectfully submitted.

JOSEPH LAMARCHE, President.
J. W. HUGHES, Secretary.
W. J. BURROUGHS, Vice president.
E. C. MOUNT.
JAS. H. DOODY.
A. FIDDES.

The report was referred to the Committee on Resolutions.

REPORT OF SANITARY COMMITTEE.

LONDON, Ont., June 30th, 1897.

GENTLEMEN,—Your Sanitary Committee for the year 1896-97 desire to report that they have met twice during the year, once at London on Dec. 3 and 4, 1896, and once in Toronto immediately preceding this convention.



The Retiring President—Joseph Lamarche.

The meeting at London was a most satisfactory one, and was called there to give aid by their deliberations and strength by their presence to the London association in their endeavors to get a plumbing and inspection bylaw enacted, which enactment is now in a fair way of being accomplished.

An earnest effort has been made by your committee to answer in a practical manner some of the many difficult questions relating to sanitary construction and apparatus, as well as devise the best and most efficient form of specification, by means of which the standard of the trade of plumbing could be raised.

Much care and deliberation was exercised to arrive at a satisfactory form of inspection law, and the results are shown in the annexed specification.

The question of license and regulation was also carefully considered, and your committee cannot too strongly urge upon the delegates in convention a careful consideration of all the questions involved, feeling sure that unless a united effort is made throughout the Dominion by each in-

dividual master plumber and local association, backed up by the National Association, but little will be accomplished.

The public at large do not hold an exalted opinion of the plumber, either in a mental or material aspect, arising mostly from a want of high-mindedness on the part of the plumbers themselves, and partly on account of a predisposition on the part of the public to look upon the occupation of the plumber as a menial one.

This is the result of past prejudice on the part of both the public and the plumbers, the plumbers against themselves, and the public against both the plumbers and their occupation.

The public should be shown that the trade of plumbing is a sanitary science, and that the plumbers of the Dominion of Canada are men, scientific and practical. The tendency to grade down should cease, and in this year, the first of existence of the National Association of Master Plumbers of Canada, a sharp line of demarcation should announce a determination to grade upwards.

The plumbers of Canada are on the march of sanitary progress. Their eyes are turned with expectancy towards this association, hoping to see the principles of sanitary science more thoroughly defined, and that it may be more quickly done, your committee recommend that the stamp of authority of this association should, from time to time, be placed upon what, in their opinion, is the latest, best and most modern practice in the science of sanitary construction, as affecting the trade in which we are all employed.

Lasting benefit will come to the trade if proper methods are recognized and adopted. If we, as plumbers, are but true to ourselves, if our aims and objects are honest, reasonable and just, there can be no question that the trade has entered upon a new era, "the new cycle has dawned."

Much good is being done to our trade in its sanitary aspect by the trade press. A special feature, in at least two of our Canadian publications, is observable, and no doubt a much greater space will be given if their efforts are recognized, appreciated and patronized by the trade.

Able publications are to be obtained in the United States, whose whole efforts are given to advancements of the plumbing trade, and this is one of the things of which we cannot have too much, for in plumbing it may be truly said "a little knowledge is a dangerous thing."

In the opinion of your committee, nothing will be so conducive to the good of the plumbers of Canada as a uniform specification, involving a close inspection, and a good workable and effective license and regulation bylaw.

Having in view the urgency of the case, if the benefits expected to accrue are to come to the present generation, your Sanitary Committee respectfully recommend:

1. That a united effort should be made by each local association of master plumbers throughout the Dominion to have a bylaw enacted, similar to the one herewith submitted, thereby guaranteeing uniformity, which is thought to be the best way to agitate for a Dominion sanitary plumbing law.

2. That at least one member of the local



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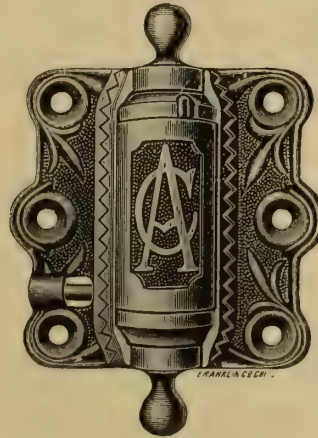
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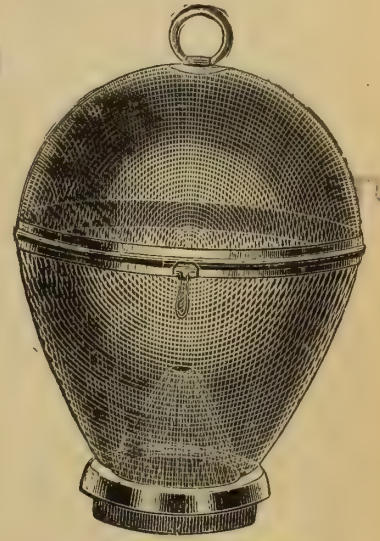
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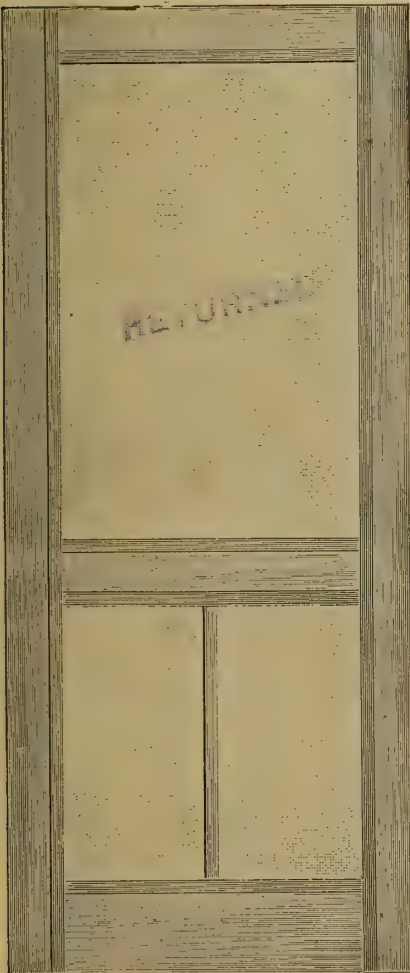
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Board of Health should be a practical master plumber, to be nominated by the local Master Plumbers' Association, and, where inspectors exist, they also to be members.

3. That at least one member of each provincial Board of Health should be a master plumber, nominated by the National Association of Master Plumbers, or Provincial Board where one exists.

4. That at least one member of the Dominion Board of Health should be a master plumber, nominated by your association.

5. That there should be, in each town or city or municipality of sufficient size, a board of plumbing examiners, whose duties shall be to advise the Council or Board of Health upon all matters relating to the construction of sanitary plumbing and advise such changes as may be necessary to keep septicification abreast with the times.

6. That inspectors should be under the control of this Board of Plumbing Examiners, who should also be empowered to decide upon and adjust all disputes arising from the operation of the bylaw.

7. That the constitution of the Board of Plumbing Examiners shall be one engineer, medical health officer, two master plumbers and one practical journeyman plumber, the last three to be chosen by the Master Plumbers' Association.

8. That inspectors of plumbing construction shall have full authority, subject to the Examining Board only.

9. That action be taken in Ontario first. Your Sanitary Committee believe the time opportune to get the bylaw enacted in most of the large towns and cities in Ontario. Since the London meeting of your Sanitary Committee a model plumbing bylaw has been enacted by Order-in-Council in Ontario, and which is a considerable step in advance, and is good as far as it goes, but it does not go far enough, and is not nearly so exhaustive or desirable as that herewith attached. The model bylaw in question is in the nature of a minimum that will be accepted by the Ontario Board of Health before any city or municipality can put in operation any system of sewerage.

It is optional with any municipality to enact any bylaw embodying more, if they think it desirable or necessary,

It will be observed that your committee has tried to arrive at a practicable basis from which to act rather than to advance theories or go into a philosophical discussion of the merits of various ideas on the subject of sanitation as a whole.

There are other and equally difficult and important matters relating to the science of sanitation, that intimately affect the plumbing, steam and water heating trade, but the ground which your committee has endeavored to cultivate is sufficiently extensive to supply food for thought and reflection. Other branches of the subject can, with profit to the trade and themselves, be taken up by future committees.

Yours, etc.,

W. H. HEARD, Chairman.

ADAM HALL.

WATSON MASHINTER.

ADAM CLARK.

S. BURCH.

NO. — A BYLAW,

To license and regulate plumbers.

To provide plumbing inspectors, plumbing examiners and their duties.

Whereas, it is desirable and necessary to license and regulate plumbers in the city of —,

Therefore, the Council of the Corporation of the city of — enacts as follows:

1. Upon and immediately after the passing of this bylaw and in every ensuing year before the first day of February, any person desiring to carry on the business or trade of plumbing, as a master plumber within the limits of the city of — shall take out a license, for which license such persons shall pay, at the time of issuing thereof, the sum of \$—, except as hereinafter provided. No person shall receive such license unless he is of the full age of 21 years, and has a place of business within —, and furnishes a bond binding himself in the sum of \$200 with at least two securities in the sum of \$100 each, to the satisfaction of —, that



President of the Toronto Association—W. J. Burroughes.

he is himself a practical plumber, or that he will employ a sufficient number of regularly educated, practical and experienced plumbers to do all such plumbing work as he may engage to do, (whether he is a practical plumber himself or not) will not permit or allow any such work to be done by or for himself, or in connection with his business, except such competent workman, and that he will not violate any of the terms and conditions, rules and regulations contained in bylaw No. —, and in any other bylaw in force from time to time in —, respecting plumbing, drainage, sanitary matters and the water works.

2. That every person desiring such license

shall file with the — a petition in writing, giving the name of the applicant, and in case of partnership, the name of each member thereof, together with the place of business, and asking to become a registered plumber, and such petition shall be accompanied with the bond hereinbefore mentioned.

3. Any change in the firm or location of the business shall be properly reported to the —, and the license shall be kept in a conspicuous place at the place of business.

4. A partnership of two or more persons desiring to carry on such business of master plumbers may do so on obtaining the license hereinbefore provided for and the word "person" in this bylaw shall include such partnership. When two or more persons are licensed as partners the license shall be issued in the name of the firm or co partnership, and no license shall be transferable.

5. All licensed master plumbers shall be held responsible for all acts of their apprentices or employes in connection with the business for which license is issued.

6. Every such license unless it is expressed to be granted for shorter period and unless the same shall become sooner forfeited as hereinafter provided, shall be for the year current at the time of the passing thereof, and shall expire on the 31st day of December next succeeding the date of the same.

7. Upon satisfactory evidence furnished to the Board of Plumbing Examiners, that any plumber has been twice convicted for any violation of this bylaw or of any of the bylaws respecting plumbing, drainage, sanitary matters or water works, the said Board of Plumbing Examiners declare the license forfeited.

8. Any plumber whose license shall be declared forfeited as hereinbefore provided, shall not again be entitled to a license until the said declaration of forfeiture shall be revoked by the Board of Plumbing Examiners as hereinbefore provided.

9. No person shall carry on business in — of — as a master plumber, unless he is the holder of a license issued as hereinbefore provided to himself or to the partnership of which he is a member.

10. Within one month after the passing of this bylaw, every man at work in the — of — as a journeyman plumber shall register his name, age, residence, and name of present employer, and any journeyman plumber who is not now employed as such, as may desire to be so employed in the — of — hereafter, must before commencing work, comply with the foregoing regulations,

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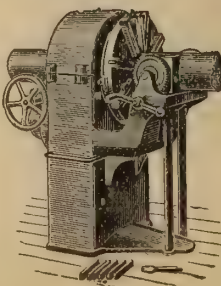
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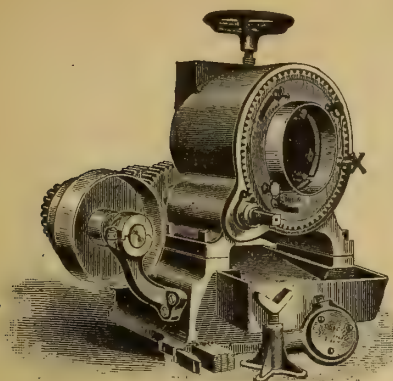
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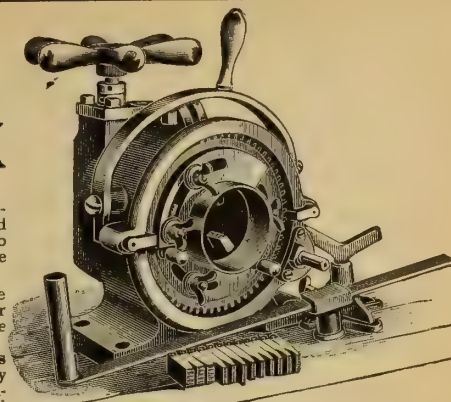
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and further that a fee of 25c. be charged for each such name registered.

11. That any person or persons, guilty of an infraction of any of the provisions of this bylaw, shall upon conviction before the Mayor, Police Magistrate, Justice or Justices of the Peace of , on the oath or affirmation of any credible witness, forfeit and pay at the discretion of the said Mayor, Police Magistrate, Justice or Justices of the Peace convicting, a penalty not exceeding the sum of fifty dollars, (\$50), for each offence, together with the cost of prosecution, and in default of payment thereof forthwith, it shall and may be lawful for the Mayor, Police Magistrate or Justice convicting, as aforesaid, to issue a warrant under his hand and seal, or in case of the said Mayor, Police Magistrate, and Justice or Justices, or any two or more of them are acting together therein, then under the hand and seal of one of them, levy the said penalty and cost or costs only, by distress and sale of the offender or offenders' goods and chattels, and in case of no sufficient distress to satisfy the said penalty and said costs, it shall and may be lawful for the Mayor, Police Magistrate, Justice or Justices, convicting as aforesaid, to commit the offender or offenders to the common goal of the — of — with or without hard labor for any period not exceeding one calendar month unless the said penalty or cost be sooner paid.

12. The Council shall, from time to time, as occasion may require, on the nomination of the Board of Plumbing Examiners, appoint such inspector of plumbing as may be found necessary, but no person shall be eligible for such appointment who shall not have passed a satisfactory examination for

proficiency in both practice and theory of plumbing and drainage before the Board of Examiners, as hereinafter provided. Such inspector or inspectors shall have full power to act on all matters under the bylaw, subject only to the Board of Plumbing Examiners. Such inspector shall be under the supervision of the Board of Health and shall be attached to the office of the city engineer and shall be paid such salary as the Council shall determine.

13. The Board of Plumbing Examiners is hereby constituted to consist of one engineer, medical health officer, two master plumbers in good standing in the — of — and one practical plumber to be chosen by the Master Plumbers' Association. The last three shall hold office for one year after their appointment, and shall be paid a fee of four dollars for each session of the board, and the board shall be called together by the engineer (who shall be chairman of the board) at such times as the chairman shall find necessary.

14. In case any dispute arises under the bylaw to license and regulate plumbers, as to whether any person or persons employed by a licensed plumber is a regularly educated, practical and experienced plumber, as in said bylaw provided, and said master plumber may require the — to permit the said workman to be examined before the said Board of Examiners, whose decision, properly certified as to the competence of the said workman, shall be final and conclusive.

15. It shall be the duty of the above mentioned plumbing examiners to enquire into all changes or disputes arising from the operation or interpretation of any part of bylaw

No. — entitled "A Bylaw to Secure the Sanitary Condition of Buildings," to hear and decide upon all disputes between the plumbing inspector and the public, and between the said inspector and the plumbers of the — of — and their decision shall be final and conclusive. It shall be the duty of the chairman of the plumbing examiners to take such necessary action within one week from proper notice to him in writing against any person accused.

16. In case of any dispute arising relating to any provision of the above mentioned bylaws, the party who disputes shall give notice to the city engineer in writing, settling forthwith the nature of the dispute and shall appear before the Board of Plumbing Examiners, who shall hear and decide on the merits of said dispute, and the decision of the said board shall be final and conclusive.

NO. —, A BYLAW,

To secure the sanitary condition of buildings.

Whereas it is desirable and necessary to make provisions to secure the sanitary condition of buildings.

Therefore the Council of the Corporation of the city of — enacts as follows:—

It shall not be lawful to construct or extend any drain for the reception of sewage or waste water under or into any building (except stables), or to connect same with any public sewer or drain except the said drain shall in its plan and construction conform to the following requirements:

PERMIT.

1. Before proceeding to construct, reconstruct or alter any portion of the drainage,

ventilation or water system of an hotel, tenement, warehouse, dwelling house or other building, the owner or house agents constructing the same shall file in the office of the — an application for a permit therefor, and such application shall be accompanied with a specification or an abstract thereof in a blank form prescribed and supplied for this purpose, stating the nature of the work to be done, and giving the size, kind and weight of all pipes, traps and fittings, together with a description of all closets and other fixtures, and a plan with the streets and street numbers marked thereon and showing the drainage system underground.

2. All plans must be legibly drawn in ink on heavy white paper or tracing linen, and must be drawn on a scale of eight feet to one inch.

3. A permit must be granted or refused within two days from the time of filing of the application, and the permit of the — (if granted) shall be valid for six months from the date issued.

4. If the — shall find the said plans and specifications do not conform with the rules and requirements laid down in respect to the drainage and plumbing in the bylaw in the city of —, he shall not issue any permit for such plumbing and drainage, and it shall be unlawful to proceed therewith.

5. The — shall be notified when any work is ready for inspection, and all work must be left uncovered and convenient for examination until inspected and approved of. The inspection shall be made within two days, except where the soil is of such a nature that it cannot be left open for two days, when the inspection shall be made forthwith after notification shall have been given to the —. The — or inspector appointed by the Corporation, appointed for that purpose, shall call for smoke test, which test shall be made by the party whose work is being inspected under the direction of the said — or inspector. The — or inspector is to supply the machine or instrument to make said test, and the result of said test shall be recorded in the — office. If the work is not found to be satisfactory, two days' notice shall be given, and if the work is not made satisfactory the penalty clause shall be endorsed forthwith.

6. After a plan or specification has been approved of, no alteration or deviation from the same shall be allowed except on a written application of the owner or the agent of the owner to the —.

TILE, PIPE AND CONNECTIONS.

7. Vitified salt-glazed earthenware drain pipes shall be equal in quality to those used for the private drain connections; they shall be laid and jointed with Portland cement or otherwise as shall be specified by the — for the private drain connection contract. The pipes used for surface or weeping drain must be laid around the outside of house walls where practicable and tapped to connect with the rain water leader. They shall have a tap placed on them which shall be easily accessible for flushing. All earthenware drains laid on newly made ground, or very wet soil, to be placed on a prepared foundation of plank or concrete. No built or mason's traps shall be used, all traps shall be of vitified salt-glazed earthenware or iron. All drains must be properly connected with a private drain and not covered until inspected. In no case shall

drains between walls of a house and street be laid until the private drain from the street line to the public sewer has first been laid and completed. All private drains laid by the city are to be taken to the outside of the wall where the buildings are on the street line. No tile shall be run through or under the wall of any building.

SOIL PIPE.

8. All soil pipe within the walls of any building shall be of iron or brass, and shall be continued at least three feet above any opening in the roof and three feet above any opening in an adjoining building, when such building is within 10 feet of such pipe, and left open so that the whole of the inside drainage may be thoroughly and constantly ventilated. (Approved tile may be used under ground; if, however, the house is drained by a continuous iron pipe from the outer connection with the house drain at least three feet outside the wall to the opening above the roof, as hereinbefore provided, the trap and the fresh air inlet may be dispensed with.) After the passing of this bylaw, no privy sinks, pan closets or any other water closets having any mechanism in connection with the bowl forming a mechanical seal, and no closet or other convenience which allows the escape into the house of gas which has been confined in any part of it or to the drain or soil pipe or which allows the accumulation of filth in or about it, shall be fitted up or used. When a soil or drain pipe (which in all cases must be of iron) passes through a wall it shall not be built in solid, and shall have at least two inches clearance, and the opening shall be covered by arch or line lintel. Earthen or iron water closets having traps above the floor using lead connections must have a cast brass flange not less than $\frac{1}{8}$ inch thick, soldered to the lead and bolted to the trap of the closet, the joint being made perfectly airtight.

Siphon jet, washouts and flushing rim hopper closets only will be allowed, and they must be fitted with flushing tanks, automatic or otherwise, of approved character and design.

No pipe shall weigh less than the following for length of 5 feet:

6 inch diameter.....	100 lbs.
5 "	85 "
4 "	45 "
3 "	30 "
2 "	20 "

All pipes, traps and fittings shall be of good quality and shall be free from flaws or defects and shall be of uniform thickness.

CESS PITS AND VENTS.

10. All connections with cess pits shall be made in same manner as for sewer, with the addition that the cess pit must be ventilated independently with separate pipe of not less than 4 inches diameter and 10 feet high, so placed that the drain pipe from the trap outside the wall to the extreme end shall have free and uninterrupted access to the atmosphere at each end.

FITTINGS.

11. No Tees shall be used, but Y connections and $\frac{1}{8}$ inch bends, or the combination of the two in one fitting, shall be used where practicable.

MAIN TRAPS.

12. Between the house and the public sewer or drain at the lower end or foot of

the vertical stock of soil pipe and between the stock and the public sewer, inside the wall of the building which it serves, there shall be placed a ventilation hand hole trap of approved description and make.

CLEANING OUT SCREWS.

13. The pipe to have two cleaning-out screws of not less than 4 inches in diameter, one located about 42 inches above and in front of the bend at the basement floor, the other to be located between the said bend and the outer wall of the house. The first-mentioned above cleaning-out screw shall be provided with a connection of the proper size to admit of the testing apparatus being attached.

SEWER VENT.

14. On the sewer or street side of said soil pipe trap a ventilation pipe shall be placed of the same size and kind as the soil pipe and carried up above the roof, as hereinafter specified for soil pipe.

FRESH AIR VENT, INLET.

15. Above the said trap there shall be connected with the main soil pipe an inlet pipe not less than 4 inches in diameter for the admission of fresh air. This pipe shall be brought up to 5 feet above grade, and if for detached building and on outer wall may be carried up above roof with the same diameter of galvanized iron pipe properly hooked to the wall every 8 feet. In all cases where the above pipe cannot conveniently be carried on the outside wall, then it shall be run up inside the wall and carried through the roof in the same manner as specified for main soil pipe, provided in all cases that the fresh air pipe shall be stopped at a point 3 feet lower than the main stack or soil pipe, the mouth of which shall be left open, or covered with basket if required.

16. Trap vent pipes may be of cast iron, lead or brass; sheet metal will not be allowed. All traps and fittings shall be equal, in quality and thickness, to the pipe to which they are attached.

17. No lead, waste or vent pipes shall weigh less than the following: $1\frac{1}{2}$ inches in diameter, 8 lbs. per yard; 2 inches in diameter, $10\frac{1}{2}$ lbs. per yard; $2\frac{1}{2}$ inches in diameter, $13\frac{1}{2}$ lbs. per yard; 3 inches in diameter, $16\frac{1}{2}$ lbs. per yard; 4 inches in diameter, 24 lbs. per yard.

18. Every water cock, bibb tap or hydrant attached to any water service or pipe, connected with and supplied from the water works system of the —, shall have legibly stamped thereon, in a conspicuous place, the name of the maker, and the same is to

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HAMILTON

be properly tested both as to strength and weight before being so attached.

19. All water supply pipes shall be laid with due regard to danger from freezing, properly laid with a fall to a stop and waste cock placed in the cellar or other convenient place where they can be entirely drained off. Each consumer in a tenement building shall be supplied with a separate stop and waste cock on the service pipes inside the building unless metred.

TRAPS.

20. All drains and plumbing fixtures of every house or other building shall be supplied with sufficient traps and vents to prevent gas from the sewer, drain or other

the roof. The rule for soil terminus, as hereinbefore mentioned, shall govern said vent pipe. Vents from water closet traps to be two inches for a length of 20 feet, and for a greater length 3 inches in diameter. Closet vents into which other vents are connected to be 3 inches in diameter.

AUTOMATIC VENTS.

22. Approved automatic vents may be substituted when necessary or advisable on special permit of the inspector.

OVERFLOW.

23. No safe waste, range boiler or cistern overflow shall be allowed to connect to any drain. All rain water and leaders shall be

room and having an area of at least one square foot and an opening at the roof to the external air of an area equal to the area of the shaft.

26. Wooden laundry tubs and wooden sinks are prohibited. All such fixtures shall consist of non-absorbent material.

FERRULES.

27. Every connection between lead and iron pipes shall be made with brass thimbles or ferrules having properly wiped joints, and the ferrules shall be properly gasketted, leaded and caulked into the said pipe. Ferrules for 4-inch pipes shall weigh not less than 2½ lbs.; for 3-inch pipes, not less than 1¾ bs., and for 2-inch pipes, not less than



GROUP OF DELEGATES AND VISITORS.

waste pipes escaping into any apartment, and every such fixture shall have its own trap with sufficient vent. No fixture shall drain through more than one trap (main trap accepted). The ventilation pipes from the traps of any fixture shall be of the same size and weight as the traps they serve, up to and including 1½ inches in diameter. For sizes over 1½ inches in diameter, one size less may be used, and for length as hereinafter specified. No vent to be used of less than 1¼ inches in diameter.

TRAP VENTS.

21. No trap vent pipe shall be less than 3 inches in diameter where it passes through

trapped, said trap to be connected with outside drain.

24. Wherever safes are placed under fixtures, the safe waste shall be run separately to the basement or cellar and be closed by a hinged brass flap valve of approved device to prevent cellar air from rising through the pipe. Urinal platforms shall not be provided with safe wastes.

25. The enclosing of water closets in wooden casings is prohibited. Water closets should never be placed in an unventilated room or compartment. In every case the compartment must be open to the outer air or be ventilated by means of an air shaft not used to ventilate any living or sleeping

1½ lbs., each ferrule not to be less than 4 inches in length. All lead pipes to have properly wiped joints. Where the trap to closet is above the floor, the said connection of the same to soil pipe shall be made of brass and rubber.

SINKS.

28. Each house or building must have its own separate soil pipe and drain, and such soil pipe or drain shall be so placed as to be always readily inspected without destruction to walls, and the plumber shall be responsible for the connection of his work with the system of drainage, which connection shall be made by a cast-iron bend and three feet of pipe extending horizontally from the ver-

tical soil pipe, and no two or more houses or buildings shall have drain in common until each separate drain shall have passed outside the walls of the house or building which it serves.

REFRIGERATOR WASTES.

29. Refrigerator wastes shall be supplied with properly ventilated traps and be disconnected and have drip basin.

30. For water-works pressure no lead pipe shall weigh less than the following : $\frac{3}{4}$ -inch internal diameter, 4 lbs. per lineal yard ; $\frac{1}{2}$ -inch internal diameter, 6 lbs. per lineal yard ; $\frac{5}{8}$ -inch internal diameter, 8 lbs. per lineal yard ; $\frac{3}{4}$ -inch internal diameter, 10 lbs. per lineal yard ; 1-inch internal diameter, 13 lbs. per lineal yard.

Galvanized wrought-iron pipe and fittings may be used for water supply pipes if desired, but no black iron pipe shall be used.

31. Every master plumber who shall himself or by his apprentice, agent or employes make any extension or alteration to, or shall remove any tap, pipe or other fixture attached to the pipes of the water works, shall, on the first day of the month in which such extension, alteration or removal was made, report the nature or extent of the same in writing to the engineer upon a written form to be supplied by said department.

32. No person except a duly qualified and registered master plumber under this law shall be allowed, without first having obtained a permit from the Water-Works Department, to open or shut off a stop-cock in connection with the service supplying any premises or buildings unless in case of urgent necessity to prevent loss from flooding, or in case of a plumber to make necessary repairs or to test his work, and shall in every such case leave the stop-cock as he found the same, and any person who shall commit any damage to any stop-cock in the service pipes of the department renders himself liable for the amount of any such damage.

33. No person except a duly qualified and registered master plumber under this law shall be allowed to build, lay, alter or change any branch pipe or connect same to the system of sewers in the city of —.

34. No person except a duly qualified master plumber, properly registered under this law, shall make any connection to or run any pipe for the purpose of conveying water from the — water works into any building or ground in the city of —.

35. All work contemplated in this bylaw shall be done in a workmanlike manner and shall be subject to the inspection and supervision of the inspector appointed by the Corporation of the city of — for that purpose, and all faulty or defective work which may at any time be discovered shall be made satisfactory to the said inspector, and when found satisfactory the certificate shall be issued to the plumber.

36. No arrangements shall be made for supplying urinals except by self-closing cocks or automatic flush tanks, and no arrangements shall be made for cleaning water closets or privy vaults by waste pipes from wash basins or by sinks or by any other means or evasion, but they shall be fitted up with the fixtures and appurtenances belonging to them respectively.

37. The — engineer, the medical health officer, and any inspector appointed for that purpose shall have the right at proper hours of the day and upon reasonable notice given and request made upon owner or agent, to enter upon and have free access to all parts of any building in the —, in which water from the water works is delivered or consumed or has connection to the sewer.

38. That section 15 of the bylaw appended to the Public Health Act is hereby appealed within the city of — except rule 1 thereof.

39. This bylaw shall go into force immediately on the passing thereof.

40. That any person or persons guilty of an infraction of any of the provisions of this bylaw shall, upon conviction before the Mayor, Police Magistrate, or any Justice or Justices of the Peace for the —, on the oath of affirmation of any credible witness, forfeit and pay at the discretion of the Mayor, Police Magistrate, Justice or Justices convicting, a penalty not exceeding the sum of \$50 for each offence, together with the cost of prosecution, and in default of payment thereof forthwith it shall be lawful for the Mayor, Police Magistrate, Justice or Justices convicting as aforesaid, to issue a warrant under his hand and seal, or in case the said Mayor, Police Magistrate or Justice aforesaid, or any two or more of them are acting together therein, then under the hand and seal of one of them, to levy the said cost or costs only, by distress and the sale of the offender or offenders' goods and chattels; and in case of no sufficient distress to satisfy the said penalty and costs, it shall be and may be lawful for the Mayor, Police Magistrate, Justice or Justices convicting as aforesaid, to commit the offender or offenders to the common gaol of the city of — with or without hard labor, for any period not exceeding one calendar month, unless the said penalty, and costs are sooner paid.

Recommended by committee.

J. WRIGHT,
Chairman.

On motion of Mr. Burroughes, seconded by Mr. Doody, the report of the Sanitary Committee was referred to the Committee on Resolutions.

LEGISLATIVE COMMITTEE'S REPORT

Your committee beg leave to report that they have enquired into the matter of incorporation for the Master Plumbers' Association of the Dominion of Canada ; we find that the cost of incorporation will be about as follows :

Advertising in Gazettes.....	\$ 30
Government fees.....	100
Solicitors' fees and disbursements	150
	\$280

The incorporation will be under the Manufacturers' Act. We might say, to take advantage of this Act it requires not less than \$40,000 of subscribed stock, and it will be necessary to have a seal, the cost of which will be about \$4.50.

We have been informed that there is not any existing Act which applies to the Dominion of which we might take advantage.

Respectfully submitted,

JOHN MCKINLEY
JOHN BORTON
F. G. JOHNSON

The report was, in the usual way, referred to the Committee on Resolutions.

REPORT OF APPRENTICESHIP COMMITTEE.

GENTLEMEN,—In carefully considering the apprenticeship matter, it is a well-known fact that many of the evils arising from the present system of employing young men to learn the plumbing business is partly the fault of the master plumbers themselves. Take for instance a case wherein a young man starts in to learn the plumbing trade and after he has served a short time—just long enough for him to make a wiped joint—he feels somewhat elated, and considers himself a full-fledged plumber, and at once asks for an increase of pay. His employer refuses to depart from what is considered customary to pay apprentices. The young man becomes dissatisfied and seeks employment elsewhere. Here is where the injustice comes in. If the young man could be advised to stay where he is learning his trade, instead of encouraging him in this nefarious practice of running from one shop to another, this evil would be obviated. Your committee think the card system would be the better way of adjusting this matter—that is to say, for instance, without a proper clearance card from his last employer he could not be taken on by any respectable plumbing establishment. Then again, on the other hand, there are times when the master plumber meets with reverses and wishes to reduce his help. Here is where the card system would come in, enabling the young man to enter another shop and complete his training in the business. This is a matter that the National Association of Master Plumbers should grapple with for the reason of turning out a superior class of plumbers, and also of protecting the young man while he is serving his apprenticeship.

We remain, yours truly,

President of Com.—HENRY DUNBRACK,
JAS. NOBLE.

Appended report of Apprenticeship Committee :

GENTLEMEN,—In handing in our report as members of the Apprenticeship Committee we must apologize for its brevity.

In our city the matter of apprentices in all trades has been the cause of great worry, annoyance, and too often financial loss. Such has been the case before our time, is now and will be in the future, unless some association composed of men of experience and ability combine and devise some means whereby justice may be done the boy as well as his employer.

To-day in Halifax there are more plumbers turned out in proportion to its population than in any other city in the Dominion— young men but half prepared to fight the battle of life, their apprenticeship being in most cases an apprenticeship in name and time only. The ranks of the master plumbers at the present time are full to overflowing, each and every member striving to make an honest livelihood. What, then, is to become of the surplus material being added day by day to the ranks of the journeyman plumber? Is it a wise policy to educate or partly educate a number who will enter into unfair competition with those who

educated them? The journeyman of to-day may be master to-morrow—we speak from a Halifax standpoint—there being nothing to prevent him; simply a matter of a little finance will put him on the road to success, or the reverse, in most cases the latter. The journeymen here are grappling with the matter, and while not working on the lines we wish, we hope they may succeed in furthering a better understanding between employe and employer.

We would suggest the apprenticeship question be given a prominent place in your deliberation at the ensuing convention, as we think it concerns each and every master plumber.

Yours respectfully,

J. G. CRUMP,

JOHN MYERS,

MICHAEL DAY,

JNO. BORTON, President.

The report was referred to the Committee on Resolutions.

THE ESSAY COMMITTEE'S REPORT.

GENTLEMEN,—The Essay Committee of the Montreal Association has been given a very wide field for the expression of its views. The subject is indeed a broad one, and if this paper contains only a few words of instruction we would feel that our labor has not been in vain.

Sanitation means the realization of perfect human existence, moral, mental, physical, and the plumber takes the most prominent and important part in bringing this about; it is he who brings to hand the water supply, and when impure provides the filter, and prevents, by perfect systems of drainage and ventilation, disease. While on this subject we must here remark that our trade does not get the credit due us by the public generally, but we should continue to advance and our trade will yet occupy the position which is its right.

To obtain perfect sanitary conditions many means have been suggested, amongst them the fostering by legislation; the question has often been asked should this be done; in our opinion, undoubtedly yes.

We know of no other means that could be employed for enforcing the sanitary reforms that may from time to time be discovered for the benefit of mankind. It would, indeed, be trying to humanity's patience to wait for such needed reforms to come voluntarily from society. It would need more than the sight of crape and lamentations of their victims to prick their conscience of their duties to their fellow-men.

To force obedience to the principles of sanitation we would advocate the compulsory inspection of buildings, old and new, once a year by competent inspectors in whose appointment the plumbers should have some say, and none should be appointed except tradesmen who have served an apprenticeship at the plumbing.

To attain perfect sanitation, and when attained to keep it, there is one absolute necessity, and that is good workmanship and attention to details in our work; we should employ none but careful and competent workmen, it will help us in the onward march towards perfection. Let us here call the attention of our fellow craftsmen to the harmful practice of hiring boys who have left some other employer without a certifi-

cate from him, stating length of service, conduct, etc. It is by this means that so many incompetents become journeymen. We owe a duty to our employes; we should show them that it is for their own good to be cleanly in habit, courteous to customers, and attentive to little details which are sometimes either neglected or carelessly done in their work; by following these suggestions they will elevate their trade and will be in a better position to command more money and the respect of all.

We would suggest that it be the duty of the presidents and other officers of our sub-associations to use all their influence with the provincial and municipal powers to secure the enactment of such legislation as would tend towards the betterment of the sanitary conditions that exist in their localities; that they urge upon them the necessity of inspection of buildings and the appointment of practical men to the positions of inspectors.

In conclusion, we have, in the foregoing, endeavored to do our subject the justice



The New Treasurer—W. M. Briggs.

entitled to it, at least as far as in our power lay. If we have made mistakes let us ask your leniency in dealing with this paper, and remember that if we have erred, we have only done what is the legacy to the human family.

Respectfully submitted by Essay Committee,

ALEX. FORREST,

J. W. HARRIS,

P. J. CARROLL,

J. WRIGHT, Chairman.

On motion of Mr. Doody, seconded by Mr. Burroughes, the report was referred to the Committee on Resolutions.

THE PROGRAMME OUTLINED.

Alderman Scott, representing his Worship the Mayor, having entered the hall, Mr. W. J. Burroughes, president of the Master Plumbers' Association of Toronto, ascended the platform and said: "On behalf of the master plumbers of Toronto, the delegates, supply men and manufacturers' welcome to

this convention Alderman Scott, representing his Worship the Mayor. The master plumbers are not very numerous, but they are strong in the faith of this association, and I trust your deliberations here will be a benefit to the craft all over the Dominion, and that it will be conducted with wisdom, and as briefly as you can carry it on. Alderman Scott, chairman of the Reception Committee of the City Council, will give you a few words of welcome, after which we shall march to the Metropolitan Church where a photograph will be taken of the delegates of the master plumbers and their friends. You will again assemble at 2.30 p.m. and will try and get through business to-day. If not, to-morrow morning will be devoted to committee work and to completing the business of the convention. At 2 o'clock, by the courtesy of the City Council, you are invited to take a drive around the city and see the many fine edifices Toronto possesses. To-morrow evening you are asked to enjoy the hospitality of the master plumbers and supply men of the city at a banquet to be given in Harry Webb's parlors. The day after that, provided your strength holds out, at 7 o'clock you will embark on the boat for Niagara. (Applause). On reaching the Falls at 12 o'clock, dinner will be provided for the party. In the evening we will return to Toronto. We expect to have a good time, and any gentleman who has not been provided with tickets will please apply to the committee for them. You will notice that the badges are all different in color. The red badges are the badges of the committee—that is, the Reception Committee. The white for the delegates. The blue badges are for visitors and others who are not delegates. I invite all master plumbers to attend our meetings, but you will not, of course, have a vote, but we would like to have your counsel and assistance." (Applause.)

GREETINGS FROM THE CITY.

Alderman Scott, on stepping to the platform, was greeted with loud applause. He said: "Mr. Chairman and gentlemen, on behalf of His Worship the Mayor, and at his request, I am here to say a few words of welcome to the delegates here assembled. His Worship wishes me to say that a previous engagement kept him away. Although he is not here he instructed me to extend to you a very hearty welcome. (Hear, hear, and applause.) On behalf of the City Council and on behalf of the citizens, I extend to you officially a very cordial and hearty welcome to Toronto. (Applause.) I also express the hope that your deliberations here will be to the advantage of the trade. Your trade is a very important one indeed. We think we can afford you all the comfort and all the advantages that any other place

can. This is a time of conventions. I suppose that this is because in union lies strength. If we would accomplish anything we cannot go about it single-handed. On the other hand, if we want to take counsel we can only do it by becoming connected with each other in some way and somewhere. I hope that this meeting will be to your very great advantage. We are pleased that you are here. I am glad we shall have the opportunity to-morrow of showing you something of our city. There is not much wealth here. We have not the number of palaces which cities in the United States may have or that Montreal may have. But in this we do feel strongly: We have more contented and happy families and more comforts of ordinary every-day life than any other city on the continent. We have not the wealth to enable people to live in palaces, although we have some palaces. But in this city of Toronto most of the people live among better surroundings than can be found in any city in the United States. (Applause.)

"Your trade is not only a useful one, but it is an honorable one. (Hear, hear.) You are engaged in looking after the comforts, conveniences and safety of the community, and it is right to expect reasonable and proper reward. I hope that the occasion of your convention will result in some of the dissatisfactions which, I learn from one of your reports, exist, being removed, and that it will be a benefit to others as well as yourselves. Your craft is a very ancient one. Until recent years it was supposed that the manufacture of lead pipe was of recent origin. This has lately been found to be a mistake, for over 1,800 years ago the plumbers' craft was pursued, except in the matter of sanitation, on much the same line as it is to-day. It was my fortune to visit some time since a city which had been buried for over 1,800 years, and there I found lead pipe and traps all very much the same as we see in use to-day, showing that the Romans over 1,800 years ago were engaged in the same class of work as you are to-day. I wish you success in your convention. Hoping you will find your families and your business prospering when you return to your respective homes, I again welcome you and hope your business will be eminently satisfactory." (Loud applause.)

PRESIDENT LAMARCHE AND SECRETARY HUGHES REPLY.

President Lamarche: "I can really not find words to express my feeling on behalf of the master plumbers now in convention for the very cordial reception we are getting in Toronto. I certainly accept with great pleasure, on behalf of the master plumbers, the words of welcome which have been tend-

ered by the city's representative. It gives us pleasure to state that Toronto has done good work on behalf of the plumbers. It is a fact that the City of Toronto has got the best sanitary laws in Canada. (Loud applause.) And not only has it got the best sanitary laws, but these laws are carried out. The object of our association is to contribute to the happiness of the citizens. It is not the consideration of money, for if we considered the amount of expense incurred by the different members coming from one end of the Dominion to the other to attend this convention it would pay us better to stay at home. But we come together for the purpose of obtaining laws and securing better plumbing. Gentlemen, let me thank you again for your very kind reception. If I was only speaking to you in another language—in my own language, for instance—I might be better able to express all I feel." (Loud applause.)

Secretary Hughes, on rising, jocularly stated that he only wished that he (Mr. Hughes) could talk French as well as Mr. Lamarche could English. Continuing he said: "I can assure you I voice the feeling of every member of this convention, and we have them from Winnipeg to Halifax, for I happen to occupy the position of delegate from Winnipeg as well as from Montreal. We heartily appreciate what has been said about Toronto's residences. Toronto is what I would call a people's city. While in the city I have the pleasure of coming from there are some nice people, there is, however, a dividing line between the rich and poor which is more marked than in Toronto. I must congratulate my Toronto friends upon the great changes and improvements which have taken place of late years. Until I arrived here yesterday I have not been in Toronto for sixteen years, and I was completely lost. The allusion has been made to the effect that our craft is an ancient one. That, I think, cannot be denied. The very name we have is taken from an old Roman word, 'plumbum,' meaning lead. The name to-day is almost a misnomer. While lead pipe was once the staple it is now being used less and less."

Proceeding, Mr. Hughes explained that where once the plumber had to work up his material largely from his raw material it was necessary for him to have greater technical knowledge than was the case at present. As a result of this change men were getting into the business who had not as careful training as plumbers formerly had. Continuing, he said: Owing to the discoveries of science people have become awakened to the fact that if they are to have good health they must have good drainage, and that if they take in the air from the sewer they cannot have good

health. We consider that if the old trade is to continue to exist something should be done to teach the craft the scientific end of the business in order that they might have that place in society they are entitled to. I don't see why the legislators should safeguard the public against poor doctors and not against poor plumbers.

WORDS FROM MANUFACTURERS.

A demand having been made for speeches from the manufacturers and wholesale dealers and suppliers who were present, Mr. Edward Gurney, the gentleman first called upon, said: I do not know of any better way of giving you a concrete illustration of the friendliness of the manufacturers of whom Mr. Burroughes has spoken, than by simply saying that we thoroughly concur in all that has been said by the city's representative, and I know that a man can do no better thing in a convention of this kind than omit to make a speech.

Mr. A. A. McMichael, of the James Robertson Co., Limited, slowly rose and with a suave bow said: "I endorse what has been said by Mr. Gurney," and took his seat amid much laughter.

Mr. Anthes, of the Toronto Foundry Co., was still more brief. He said: "Mr. Chairman, I thank you," and took his seat amid renewed laughter.

By this time the other manufacturers and supply men had quietly made their exit in order to avoid making a speech, while the president remarked: "Gentlemen, I guess this is a put-up job. They won't make a speech. They will only support the Master Plumbers' Association." (Laughter.)

After these little amenities the delegates marched to the grounds of the Metropolitan Church, where the accompanying photograph of the delegates, their wives and daughters and visitors, was taken.

AFTERNOON SESSION.

The convention resumed at 3.15 p.m., with President Lamarche in the chair. The attendance was not as large as at the morning session, the holiday attractions around town, together with the extreme heat, no doubt, accounting for it.

THE PRESIDENT'S REPORT.

After the preliminary opening the first order of business was the president's report. Mr. Lamarche pulled his type-written report from his pocket, handed it to Secretary Hughes, and walked down the hall to the door.

"Am I to read your report?" called out Mr. Hughes, as he glanced over his spectacles at the retiring figure of the president.

"Yes," was the laconic reply of Mr. Lamarche, as he made his exit.

"Yes," jocosely remarked the secretary

"he has gone out to have a smoke while I read his speech." (Laughter.)

But Mr. Lamarche had not gone out to have a smoke, for in a few minutes he came back and took a seat beside the chair, which was now occupied by Vice-president Burroughes, and quietly listened to his own address. The following is the address:

GENTLEMEN: I have to-day the honor of presenting to you the first annual report of the president of the National Association of the Master Plumbers of Canada.

This being the first year of our organization, a great deal should not be expected of us. Still I have reason to congratulate you on what I believe to be the great success obtained.

On the 2nd of July last, we laid the basis of our organization, we decided that we should try to do, but all had to be done. On July the 13th, the machinery was started by the sub-committee of the Executive. Committees were appointed, printing of the report of the convention, printing of circulars treating on the benefits of the organization, drafting and printing of the Montreal resolutions, according to motion adopted at the convention. All details pertaining to a vast organization were attended to. To do this the sub-committee had to correspond with the whole Executive, as no decision could be arrived at except by the consent of the majority. I bear specially on this point on account of the delay which is caused by not getting prompt replies. Nearly all the work having to be done by correspondence, the Executive should be very particular in answering immediately the letters they receive.

The effect of the above work, in accord with the decision of the convention, has made itself felt, first, in the forming of new associations of master plumbers, and others on the way to be formed. Windsor, Stratford and St. Thomas are now in line through the hard and very effective work of our Vice-president Smith, of Ontario, who well deserves the thanks of the association. Winnipeg is also formed and represented here to-day by proxy. Kingston, Cobourg, Hamilton and others should now follow.

Places where there are not many master plumbers should remember that their help is needed as much as in larger cities. Either the distance or number does not interfere with us being confreres and having dealings with the same men. The same interests bind us together, and small places are therefore as much needed and as welcome as larger cities.

I have had to make several trips to Quebec and Ottawa, who, although represented at our convention, only came regularly into line afterwards.

New members have come in from St. Hyacinthe, Richmond and Sherbrooke, and we have news from Vancouver, which will complete the chain that will encircle the whole Dominion.

Another result, and one no less important to us, is the existing relations with the wholesale supplies. The Montreal resolutions, based on the principle adopted at our convention, were distributed to the wholesale dealers in plumbing goods throughout Canada. I am glad to say that all the

principal dealers and nearly all the wholesale houses have signed the resolutions, showing thereby their good wishes towards our craft. The signatures were not all obtained without a certain amount of consideration on their part; either the explanations of our demands were not thoroughly understood, or they were believed to be arbitrary. The Quebec wholesale houses signed the resolutions after an interview and verbal explanations given in Quebec City in the month of January last.

I had a very important interview in Montreal with Mr. McMichael, the president of the Toronto association. After explaining our resolutions, as interpreted at Quebec, I had the pleasure of hearing Mr. McMichael say that not only would he advise his association to sign in our favor, but that he would do everything in his power to see that it was lived up to, and that our craft should receive justice.

I wish to say here that I would be glad to see all the wholesale dealers of Canada united in an association to protect their own interests. The dealings between both bodies would certainly be easier and of more advantage to each other. I know that some of those who have signed our resolutions have lived up to them; I know that others have not carried them out as they should, mostly through fear of losing a sale, although they have acted a great deal better than before. A very few have refused to sign. I am sure that after this convention, knowing the injustice they are doing us, and the determination on our part to see the resolutions carried out, they will see their way to sign our agreement, and that the odd sales that may be lost will be fully replaced by the master plumbers' trade.

We must now most decidedly see that we encourage none others but those who help us. It is the general way of living in this world and we ought not to be the last to carry it out.

We must also help our wholesale men by supplying them with the names of all master plumbers according to the interpretation of the term. Each local association should see to it in its own locality and report monthly to the National office. Too much trouble cannot be taken to see that this is carried out, as the wholesale men are not able to distinguish between master plumbers, journeymen plumbers and contractors. If a man comes in the store with his money, calling himself a master plumber, the wholesale man will not nor cannot take time to go after possible information to see if he is the right man to whom he should sell. It is therefore our duty to see that they receive a complete list of bona fide master plumbers, monthly notices of changes and the deserved help from us. Complaints of the agreement being broken should always be very carefully made and positive proof sent in to the National office. It alone has a right to deal with trade relations which have been decided by the convention.

Local associations must help us, but agreements and difficulties should always be settled by the National Association, and all dealings in the Local or the National Association should always be kept secret. We will no doubt experience some trouble in the perfect working of our resolutions, but if the wholesale dealers and the master plumbers

look to their own interest, it will be easily overcome.

The plumbers themselves are their worst enemies. It is yet very common to see master plumbers going into wholesale stores, getting the goods charged to their customers and getting a discount reserved on what sales may have been taken. This is paving the way for that customer to return to the wholesale man and at the same time, if he does return, it will put the wholesale man in a false position if he refuses to sell.

We also have to suffer a good deal through the journeymen plumbers who lead customers to wholesale houses and do their work by the day, the contractor supplying the material by getting it from dealers who are not in accord with us. I believe that we could get to the root of that evil if journeymen associations were formed and would work in accord with master plumbers. While protecting themselves, we would cheerfully help them if they would protect us.

Competition is now so keen that it actually forces some of the master plumbers to go to some excess. Now that we have the pleasure of looking at one another, our relations being much more intimate, we should try to help one another more in the future than in the past.

I am glad to say that one large manufacturing firm, who were also jobbers, have now discontinued the contracting department to continue only their supply. That is the Robert Mitchell Company, and I would recommend them to your consideration. I am pretty well informed that others will soon follow in the same direction.

In January last, the full Executive Committee met in the city of Quebec and discussed several objections which were made to our resolutions principally affecting the hardware stores, engine builders, pump manufacturers, brewers, etc. Certain decisions were arrived at, but this convention will now have to try and solve that problem.

I may state here that we were very kindly and heartily received by our confreres in Quebec. Everything was very pleasant, barring one little accident: one of the eminent officers of the association nearly getting drowned in the snow on the Plains of Abraham, but was safely rescued. Fortunately, the accident happened after the close of our meeting.

The meeting, although expensive, has been of great help to our association. As I said before, objections of the wholesale men were discussed and settled in a prompt and just manner, having the effect of getting the remainder of the wholesale men to sign.

The money expended for the year's work is very, very little in consideration of the great amount of good results obtained for the trade in general. No man alone with one thousand times the amount spent could have realized the same advantages. Organization alone could do it. And we cannot expect that those who devote their time and their intelligence will also pay heavy expenses when they are working in the general interest. I would like, you, gentlemen, to impress on your local association the small per capita tax called for considering the large amount of benefit realized.

Another remark I would like to make in

the interest of the association is that the plan adopted last year of naming the president, the secretary and a delegate for sub-committee is a very good one, and the idea should be continued. Be very careful in the choice of your head officers. That those who may be chosen may not only be good men, but men willing to spend a great deal of time, and, may be, a certain amount of money, in the interest of the association. You should be especially very particular in choosing your secretary, as knowing the large amount of work which was cheerfully done during the past year by our worthy secretary, Mr. J. W. Hughes. It is no easy job to tackle. My great wish to the association is that a man as well qualified as our present secretary may be found to take the position, as with him I would be positive of the success of the association. I may mention, in passing, that he had the honor of being named in November last chairman of the House Sanitation Committee of the American Public Health Association, an honor which also reflects on this association.

Plumbing bylaws, in our different cities and towns, is something that should not be forgotten by the local associations. They are the principal stones of our foundation. It is by them that we will get better plumbing done. It is through them that we will elevate the standard of the plumbing trade, and when we have good sanitary laws well carried out, then we will have done a great deal in the interest of the public health, and our association will be better appreciated by the public.

I do here, in the name of the association, cordially thank the press in general for what help they have done for us during the year. Of course, I especially thank the trade press, which have all been very kind and useful to our association.

To the members of the association which conferred on me the honorable title of president of Master Plumbers of Canada I offer my sincere thanks. I cannot express my feelings for such a great honor. I have tried during the year to do my best to deserve it. If I have not filled the position as it could have been filled I have certainly done my best to further the interest of our association. I have never, in my business career, come in contact with more capable, energetic gentlemen than those who have formed the Executive Committee. Their very able advice and decisions have rendered my task less difficult. I feel highly honored of having come in contact with them, and thank them sincerely for their courtesy towards me. I must especially mention Messrs. Hughes and Mount, with whom I have been meeting weekly in the interest of the association. More devoted and courteous gentlemen cannot be met.

My dealings with the wholesalers have been very cordial, and I hope that during my term of office nothing has been done on my part that could have offended any one. I only had in view the fulfilment of my duty.

I feel proud of having the honor of presiding at this second annual convention in Toronto, and I wish our deliberations, with the help of God, may be just, courteous and fruitful.

On motion of Mr. Fitzsimons, seconded by Mr. Carroll, the report was received.

A letter having been read by Mr. La-

marche from Mr. A. G. Booth, secretary of the Plumbers' and Steam-Fitters' Supply Association, asking for a conference with a committee of the National Association of Master Plumbers, it was decided, on motion of Messrs. Lamarche and Kane, to comply with the request.

These, on motion of Mr. P. C. Ogilvy, were named as the committee: President Lamarche, Vice-President Burroughes and Mr. J. B. Fitzsimons.

REPORTS OF PROVINCIAL VICE-PRESIDENTS.

The first report presented was that of Mr. W. Smith, of London, vice-president for Ontario. It was as follows:

GENTLEMEN,—As vice-president for the province of Ontario, I most respectfully submit my report for the year ending. One of my first duties was to appoint a Dominion Sanitary Committee, and feeling satisfied that we required our best men on that committee, I took great pleasure in appointing the following: W. H. Heard, London, Ont.; A. Clark, Hamilton; W. Mashinter, Toronto; A. Hall, Peterboro'; — Burch, Kingston, Ont.

In January last I attended a meeting of the Executive which was called together at the city of Quebec, and I feel satisfied when you hear the report of same you will be satisfied. It affords me great pleasure to let you know that I have tried and done my best to get all the plumbers in my province to become members of our Dominion association. I organized a local association in the following places: March 3, Stratford, with 4 members and one from Mitchell. There is still one of the plumbers in Stratford that will not join us. One in Windsor with a membership of 8, composed of all one material. One in the city of St. Thomas with a membership of 6, and the last report states it is there to stay.

I now call special attention of all the members present to the great necessity of having proper printing matter for soliciting members to join us, and also for forming new local associations, and the laying down of laws and penalties to govern all our members, for the purpose of placing us on a solid foundation, and I hope this convention will appoint a strong, good working committee to attend to same.

I must also state that I think it would be to our interest to adopt a printed obligation for each member to sign when forming or joining an association.

I have written a letter to nearly all the plumbers in my province urging upon them that they should attend this convention; and I have also written a great number of letters to all plumbers that I could hear of, asking them to join their nearest local association. I must here state that I have found a great many plumbers who have treated my letters with contempt; did not even think it worth while to answer them.

I know that it will be good news to you when I state that it has astonished me to see the good feeling that is shown towards each other by the plumbers when they become members of the Master Plumbers' Association,

Now, I want to impress upon the minds of all those present that the corner-stone of our success is secrecy. I have found in our own town that the wholesale men have been informed too much of what we have done, and on that account I must here state that the wholesale men of our city have been doing just as they pleased with us. As your vice-president, I have been a sufferer to a large extent, on account of some of our members not being men enough to stand up for their rights.

I find in nearly every case, when you talk association matters in trying to get a member to join us, the first question he puts to you is: "How are we going to get better prices?" and I give him to understand that the first step is to get thoroughly organized and place ourselves in a position to look upon our brother plumber as our best and truest friend. Then will be the time when we shall have better prices.

Now, in conclusion, I must state that I have written over two hundred letters in connection with association matters during the past year, and have endeavored at all times to be prompt in answering all correspondence. I have endeavored, to the best of my ability, to transact all business that came before me during the past year. I take great pleasure in thanking all the officers and members of the Dominion Master Plumbers' Association for the kindness shown towards me during my term of office.

President Lamarche: "You have heard the report. What is your pleasure in regard to it?"

On motion of Messrs. Allison and Martin it was received and referred to the Committee on Resolutions.

SECRETARY'S REPORT.

MR. PRESIDENT AND GENTLEMEN,—Here-with find detailed report of money received during the year ending June 30, 1897. Also accounts of expenditures for the same period: 363 letters have been issued from the secretary's office, besides the annual reports, circulars and other printed matter. I thank the officers and members throughout the Dominion for their hearty co-operation and assistance. I am,

Respectfully yours,

J. W. HUGHES.

The following are the names and places of meeting of the local associations in affiliation with the Dominion Association, and the number of members of each: Montreal, 82; Toronto, 55; Halifax, —; St. John and Fredericton, 20; Winnipeg, 8; Kingston, —; Ottawa, 9; Quebec, 22; Windsor, 7; Stratford, 5; Hamilton, —; Ste. Hyacinthe, 3, in affiliation with Montreal; St. Thomas, 6; St. Catharines, 6; London, 15.

TREASURER'S REPORT.

Receipts---

Amounts received from secretary to date (June 30)..... \$457 00

Disbursements---

Secretary's report to December 31, 1896.....	\$117 65
Postage.....	05
Secretary's account to June, '97	33 50
Bank charges.....	40
	\$151 60
Balance on hand in bank.....	305 40
	\$457 00

Balance in banks as per bank books	\$305 40
Cash received from Windsor association	14 00
Cash received from St. Thomas association	12 00
Cash received from Ottawa association	18 00
Cash received from Winnipeg association	16 00 60 00
	\$365 40

Both the secretary's and the treasurer's reports were referred to the auditors, Messrs. E. Mount, W. H. Heard and J. B. Fitzsimons.

At a subsequent stage of the convention the auditors handed in the following report, which was adopted :

The auditors recently appointed have met and examined the treasurer's books, and beg to report that they have found them correct. The balance is \$365.40, agreeing with the bank balance and cash on hand. Vouchers have been produced to verify the payments made.

Respectfully submitted,

E. C. MOUNT.

JAMES B. FITZSIMONS.

W. H. HEARD.

Secretary Hughes read a report from Committee on Resolutions recommending the adoption of these reports: Executive Committee, Sanitary Committee, Essay Committee. This was accordingly done.

The Committee on Resolutions also recommended in regard to Vice-President Smith's notice of motion that clauses 1, 2, 3 and 4 be filed for future reference, and that clauses 5, 6, 7, 8 and 9 be adopted.

On motion of Messrs. Briggs and Burroughes, it was ordered that the report be received and discussed clause by clause.

The discussion which followed was somewhat lengthy and animated. Vice-President Burroughes set the ball rolling. He declared that the proposition to issue a chart was premature in view of the fact that the matter of being incorporated under a Dominion charter was under consideration.

Mr. Smith: "I might ask what prospect we have for incorporation?"

Mr. Heard: "Would it not be best to allow the matter to stand before a report be received in regard to incorporation?"

Mr. Burroughes explained that the Toronto association had had the matter of a chart under consideration for some time. The idea was to furnish each member with one which he would hang in his office or shop. He produced a couple of sketches of the proposed chart.

Mr. Smith showed that he had not been asleep either in regard to the chart question and handed to Mr. Burroughes a sketch of a chart he had had done.

During the further discussion which ensued, it was pointed out that, in order to become an incorporated body under the Dominion Act, it would be necessary to

subscribe stock to the amount of \$40,000, and, in addition to this, there would be expenses to the amount of three or four hundred dollars.

Eventually it was decided to leave clauses 5, 6 and 7 over for further consideration.

After some further discussion of clauses 8 and 9, it was also decided to leave them over, pending the report of the Legislative Committee.

Secretary Hughes suggested that, as the Executive Committee had some unfinished business to transact, the proceedings of the convention be suspended for a few minutes. This, upon motion of Mr. Heard, it was decided to do.

AGAINST INCORPORATION.

When the meeting again convened the Legislative Committee handed in a report in regard to incorporation. It was to the effect that it did not consider incorporation possible.

President Lamarche explained, during the discussion which followed, that the Legislative Committee had been asked to investigate the question of incorporating the organization. That committee did not consider incorporation under the Dominion Act possible. Under the circumstances he did not see that they could do otherwise than receive the report and lay it on the table.

Mr. Briggs, having suggested that it would be easy to get incorporation in Ontario and Quebec, the president said that question might be left to the next Executive Committee.

Eventually, on motion of Secretary Hughes, seconded by Mr. Wright, the Executive Committee was instructed to make further enquiries as to incorporation.

AMENDMENTS TO THE CONSTITUTION.

The sub-committee on constitution and bylaws reported as follows:

GENTLEMEN,—Your committee on amendments to the constitution and bylaws beg to present the following report and recommendations.

Article 1, page 20, after the word "plumbers" add "gas, steam and hot water fitters."

Article 2, page 20, third line, after the word "sanitary" add "heating, lighting, ventilation," and where the word "trade" is mentioned, substitute the word "trades." Erase the words "master plumbers" (page 21), and substitute the word "masters."

Article 4, page 21: Erase the words "the president of each local to be a delegate ex-officio" and substitute "the president to have power to nominate delegates for any association not represented." Erase words "at or," third line or four line "first meeting in May."

A new clause to be known as No. 17, and comprising rules of procedure, was also recommended.

After the report had been considered by the Committee on Resolutions it was, on motion of Messrs. Heard and Borton, adopted.

Just before the convention adjourned at 6.15 p.m., the Resolution Committee reported "that after hearing the report of the Legislative Committee in regard to incorporation, this committee is of opinion that this association should adopt clauses 5, 6, 7 and 8 of Mr. Smith's motion."

EVENING SESSION.

The evening session was devoted to private business.

SECOND DAY.

The meeting convened at 10.30 on Friday morning, President Lamarche in the chair.

Owing to a slight temporary illness, Secretary Hughes was not present at the opening of the meeting, but he came in about an hour afterwards. During his absence Mr. Mount, of Montreal, acted as secretary.

Some discussion took place over a letter from a Quebec house regarding members of the association not dealing with local houses, and eventually this resolution was carried:

That this convention desires to impress upon master plumbers the importance of encouraging a preference for their local dealers when prices and material are equal, and that the Executive Committee be authorized to notify all master plumbers and wholesale dealers to that effect.

MASTER PLUMBERS AND SUPPLY MEN.

President Lamarche reported that the committee appointed on the previous day to confer with a committee from the Plumbers' and Steam-fitters' Association had met that morning, and he called upon Vice-President Burroughes to read a memo of minutes arising out of said conference. Mr. Burroughes accordingly presented the following report:

Messrs. Jos. Lamarche, president; W. J. Burroughes, vice-president; J. B. Fitzsimons, represented the National Association of Master Plumbers, and Messrs. A. A. McMichael, P. McMichael, James Morrison, A. McArthur, W. A. Carrick, A. Anthes, Ed. Gurney, Geo. A. Booth, of Toronto, and Mr. McLaren, of Montreal, the Plumbers' and Steam-fitters' Supply Association.

The definition of the term Master Plumbers was discussed at length, and it was finally decided that the National Association furnish a list of the bona fide master plumbers to the wholesale dealers. The clause referring to iron pipe being placed on the exempt list was discussed at length. President Lamarche announced he could not consent to make exemptions for any particular city or province, and that it must be largely governed by local conditions. No definite action was decided upon outside of the convention.

Mr. Gurney requested that all boilers and soil pipe for green house work be placed on the exempt list. A lengthy discussion ensued, Mr. Gurney pressing his claim, Messrs. Lamarche, Burroughes and Fitzsimons opposing him. Mr. Gurney contended that he had always enjoyed this privilege, and he could not see that any injustice would accrue

to the plumber, as the purchaser always did his own fitting up.

"Your committee beg to report they refused to consent to this suggestion, and gave as a reason it would open up the door for manufacturers of other specialties." It was also suggested by the supply men that a 10 per cent. margin might be adopted. Mr. McMichael also requested that the committee report back to this association. They think the master plumbers should, in justice to all concerned, confine the purchase of their supplies from the signers of the resolutions.

On motion of Mr. Burroughes the report was referred to the Executive Committee.

The next order of business was the election of officers, and the president named the following as a Nominating Committee: Messrs. George Perrier, Halifax; J. R. Kane, Quebec; Thos. Moll, Montreal; F. J. Johnson, Ottawa; A. Purdy, Toronto.

After the Nominating Committee had retired, Secretary Hughes asked: Has anything been done, Mr. President, with regard to affiliating with the Master Plumbers' Association of the United States?

President Lamarche replied that nothing definite had been done. He thought that while union on a financial basis was not feasible, that a sympathetic union was.

Mr. Heard suggested that the matter be left in the hands of the new Executive, and moved a motion to that effect.

Mr. Fitzsimons: "I think the secretary might be instructed to communicate with the National Association of the United States, expressing our kindly feeling toward them. I do not think it would be necessary to refer it to the Executive Committee, and if we did nothing would come of it."

President Lamarche: "How would it do for the presidents of the respective associations to have a conference in regard to the matter?"

It was finally decided to leave the matter with the new Executive.

NOMINATING COMMITTEE'S REPORT

The Nominating Committee handed in the following report:

President—Joseph Lamarche, Montreal.
Vice-President—W. Smith, London.
Vice-President for Ontario—John McKinley, Ottawa.
Ditto for Quebec—P. J. Carroll, Montreal.
Ditto for New Brunswick—J. H. Doody.
Ditto for Nova Scotia—John Borton, Halifax.
Ditto for Manitoba—Irwin, Winnipeg.
Secretary—J. W. Hughes, Montreal.
Treasurer—W. Briggs, Montreal.

Executive Committee, one from each province—Ontario, J. B. Fitzsimons, Toronto; Quebec, R. Sampson, Quebec; New Brunswick, Thomas Campbell, St. John; Nova Scotia, Geo. A. Perrier; Manitoba, — Stevenson, Winnipeg.

President Lamarche thanked the committee for again nominating him for the presidency, but he emphatically declined to

accept the office. "I shall have the honor of remaining on the Executive," he concluded, "and shall work just as actively for the association as I have in the past." (Applause.)

Mr. Hughes declared the work of the secretaryship had been a labor of love to him, but he thought it was proper there should be a change of officers and declined to stand.

"Then," said Mr. Lamarche, as Mr. Hughes concluded his remarks, "the only thing to be done is for the Nominating Committee to again retire."

"We have already considered the matter," remarked Mr. Purdy, as he jumped to his feet, "and beg to submit the name of Mr. Joseph Wright, of Toronto, as president, and that of Mr. W. Mansell as secretary."

Mr. Burroughes: "It occurs to me that this is a matter of special importance to this association. The delegates here representing the National body should take into consideration not only the standing of the nominees, but they should also be satisfied that all put up for any official capacity should be men capable and perfectly willing to do their utmost in the interest of the association. We don't want anyone put forward as a candidate who is afflicted with hand-to-hand enthusiasm. We want officers whose enthusiasm will commence on taking office and continue till their time expires. Every delegate here is fully capable of carrying on the work of the association, but the question is, is he willing to do so? This association needs men of work. I have not had much to do with National Association matters, but I have learned that a great deal of executive ability is required to keep affairs going in the right direction. We have with us to-day a gentleman who has been an official of the association since it was started, and one whom we know has done a great deal of missionary work, a man who is well versed in the details, and, if elected, would carry out the wishes of the association and do his work well. I therefore move, in amendment, that the name of William Smith, of London, be put forward as president."

Mr. Wright: "As my name has been mentioned in connection with the presidency, I therefore decline in favor of Mr. Smith, and second Mr. Burroughes' resolution."

Mr. Wright was not, however, permitted to retire.

Mr. Smith: "Gentlemen, before the ballot is taken I wish to say a few words. In the first place I do not feel capable of filling the position, and, in the second place, I think that where we have the president we should also have the secretary. Now I

think that ought to be well weighed before you elect your president."

Messrs. Borton, Kane and Chalfield, having been appointed scrutineers, a ballot was taken, with the result that Mr. Wright was declared elected.

Mr. Heard was nominated by Mr. Smith as provincial vice-president for Ontario, but that gentleman declined, and Mr. McKinley's name stood.

When it came to the secretaryship, Mr. Fitzsimons moved in amendment that the name of Mr. Burroughes be put forward.

Mr. Burroughes: "I very much appreciate the nomination of my name for the secretaryship. I refused to be nominated for the presidency, and if for the presidency surely I would not take the secretaryship. I have private reasons for refusing to take any position of trust in this association."

Mr. Mansell: "Not being a delegate I am not qualified to stand for the office."

The President: "Are you a master plumber?"

Mr. Mansell: "Yes."

The President: "Are you a member of the Master Plumbers' Association?"

Mr. Mansell: "Yes."

The President: "Then it lies with this association to say whether or not you are entitled to the office. I know of nothing in the constitution which says you are not."

The nominations being declared closed, Mr. Mansell was declared elected by acclamation.

When the Executive Committee was reached Mr. Sampson requested that his name be withdrawn as representative from Quebec, and that a French-Canadian be placed thereon in his stead. He suggested Mr. Arch. Picard, and his suggestion was concurred in.

It was now time for the retiring president to leave the chair. "It is," he said, "with regret I leave the chair. I wish the officers success, and congratulate the association on the election of such capable officers."

President Wright was warmly applauded as he stepped to the platform. "I thank you, gentlemen," he said, "for electing me president of this association. I only wish I could speak with the ability of the retiring president, in order that I might adequately thank you. I will do my best to make the Plumbers' National Association a success. I will give to the office all the time that is necessary, and I hope you will give me all the help you can." (Applause.)

QUEBEC THE NEXT MEETING PLACE

Mr. Lamarche: "I move that the next place of meeting be Quebec. I don't want to offend the people of Ottawa. But we have in Quebec a good many plumbers who have

not fallen into line. The members of the association in Quebec have a great deal of trouble, and it would help them to have the next convention of the National Association there."

The motion was seconded by Mr. Smith and carried unanimously. The date of the meeting will be decided by the Executive.

Mr. Fitzsimons moved, and Mr. Forrest, of Quebec, seconded, a vote of thanks to the retiring president, secretary, and other officers. This was carried amid "They are Jolly Good Fellows," with an extra cheer and "tiger" for the retiring president.

A special committee reported in favor of imposing a per capita tax of \$4 per member for the ensuing year. The report was referred to the Executive Committee.

COMPLIMENTARY WORDS FROM MR. HARRIS.

Mr. J. W. Harris, of Montreal: "Before we adjourn I wish to make a few remarks. I am a French-Canadian. I am going to speak in the interests of the French-Canadians from Montreal. My language is somewhat more French than English. I have to thank you very much on behalf of my French confreres for the way we have been received here by our English confreres. Mr. Sampson courteously gave place to Mr. Picard, a French-Canadian, on the Executive Committee. The English are more active when organization is taking place than we are. They go for it and work. The French Canucks are a little stubborn. But when they once enlist in the ranks they are hard workers. (Hear, hear and applause.) We have an example of that in our ex-president. But we are trying hard in Montreal to get more of our French confreres to come into the association, and when they come to consider the work we are doing for them they will come in. When they do come in they will be workers. Our worthy ex-president is trying hard to get them in, and will get them in. The signs of the past year tell us so."

Proceeding, he said there was a time when he did not attend the meetings regularly. "But my friend Lamarche began to teach me, and I was a pretty good pupil. Then I was elected secretary. One night I was away and I got it in the neck, I can tell you. (Laughter.) We are succeeding pretty well, and I hope that you in Toronto are doing the same. You are English here, and I suppose you will succeed faster. I have much pleasure in moving a vote of thanks, in the name of my French confreres, to the master plumbers of Toronto. When I go back to Montreal I shall take great pleasure in telling of the kindness towards us."

Mr. Hughes immediately got upon his feet to second the motion.

"You are not a Frenchman," jocularly interposed Mr. Lamarche.

But if he was not Mr. Hughes proved in a five-minutes' speech he could talk French, much to the amusement of the delegates.

After some more pleasantries Mr. Harris' motion was carried.

Shortly before 2 o'clock, amid much merriment, the business of the Association of National Plumbers' was concluded and the meeting adjourned.

After luncheon the delegates entered carriages provided by the City Council, and were driven to the several points of interest in the "Queen City."

THE BANQUET.

A banquet was held in the evening in Harry Webb's parlor, and it was a most successful affair. Recherche were the arrangements, enthusiastic the guests, excellent the speeches and songs, and brilliant the witticisms. Two long tables extended down the dining hall and these were crossed at the head with a third. At these tables sat about one hundred and forty guests. The decorations comprised a profuse display of peonies.

President Burroughes, of the Master Plumbers' Association of Toronto, occupied the chair and Mr. J. B. Fitzsimons the vice-chair. Ranged on the chairman's right in the order named were President Wright, of the National Association of Master Plumbers; Mr. S. G. Curry, president of the Architects' Guild; Dr. Bryce, of the Provincial Board of Health; Mr. W. Smith, vice-president of National Association of Master Plumbers. On the chairman's left were ex-President Lamarche, Messrs. Edward Gurney, J. W. Hughes, and A. F. McLaren, Montreal.

The hour of ten had just struck when Chairman Burroughes arose to open the toast list. The first toast was, of course, "Her Majesty the Queen," which was drunk amid more than usual enthusiasm.

"Before proposing the next toast," said the chairman, "allow me, on behalf of the master plumbers and manufacturers and supply men, to extend to you a hearty welcome on this the occasion of our second annual banquet in Toronto. It gives me great pleasure to know that there is such a large representation of the master plumbers of the Dominion here to-night. On all sides I have heard nothing but warm expressions in regard to the enthusiasm and unanimity exhibited by the delegates. The next toast I have the pleasure of proposing is that of 'Canada,' coupled with which is the name of a gentleman, who, while not a plumber, is a plumber's friend, which is better. His whole life has been spent in the advancement of sanitary science and the general

improvement of the plumbing trade. I have reference to Mr. Bryce, of the Provincial Board of Health."

Before the doctor rose to speak Mr. Grant sang the appropriate and patriotic song, "The Land of the Maple," the chorus of which ran:

The land of the maple is
The land for me,
The land of the thistle,
Shamrock and lea.

SANITATION.

"It seems to me," began the doctor, "that if there is anything in a born Canadian he should have ambition to do in life it is something whereby, in the estimation of the public, the country may be a little better from some standpoint or other from his having been in it. (Hear, hear.) My special work has been in regard to sanitation. Sanitation in this country is not as old as it is in England, where it is the growth of just fifty years. The first board of health and the first registration act was placed upon the Statute Book fifty years ago. We may, therefore, fairly say the beginning of the reign of Victoria was the beginning of sanitation. In Canada the work of sanitation is much younger. We started sanitary legislation here exactly fifteen years ago, and it has been my high privilege to direct the progress of sanitation in Ontario. I know of no direction in which progress has been so marked as in the science of plumbing. In the early days science included three branches, namely, chemistry, natural science and geology. In the old days of forty years ago cholera was considered a visitation from God. Later it was said to be due to the town pumps of London; but later still people began to discover that there were many other things besides town pumps, etc. They have discovered that foul air from sewers circulating through the houses has a great deal to do with disease. That day has gone by, and we have what is called sanitary plumbing. The Ontario Board of Health does not take credit for the progress made. You have such men as the manufacturers of plumbing material. They have spent their energies in turning out better and more scientific materials. You have had individuals among you who looked upon plumbing alone as an art, but not as a science. Plumbing, gentlemen, is a pure science. (Hear, hear.) The plumber must keep away the gases of fermentation from the dwellings."

Continuing, he said: "We have to thank the manufacturers of plumbing materials for the advancement which has been made. I will not urge further amalgamation, but I think the time has come in Ontario, and in other provinces as well, when we may claim further legislation whereby the master

plumbers should be so recognized by law, that no second-class work shall be allowed, and simply on the ground of public health." (Hear, hear.)

"The Mayor and Corporation" was responded to by Ald. Scott. "I do not know," he said by way of introduction, "that anyone can say, with truth, any good thing about the Corporation of the City of Toronto. (Laughter.) My task is made easy," he continued, "by this quotation which I see on the toast list, namely, 'the art of ruling consists for the most part in persuading the people to believe that whatever happens happens through us.' Well, that is precisely what takes place. It lies at the very door of the corporation. We cannot levy a tax without being blamed for it. If anything goes wrong with a telegraph pole or a boy jumps over the fence and steals apples the corporation is to be blamed."

"I believe it, I believe it, I believe it just now," burst from the guests.

In conclusion the worthy alderman said that the corporation would be willing to take into its serious consideration any proposition looking to the advancement of the interests of the plumbers. But in any further amendments we may make we shall have a clause inserted to the effect that apprentices shall not be allowed to go to the shop more than three times for benzine during the afternoon." (Laughter.)

Vice-Chairman Fitzsimons proposed the next toast, It was that of the "Supply Men and Manufacturers." "The supply men furnish us with supplies, and charge nothing for them," remarked Mr. Fitzsimons. The names coupled with the toast were Messrs. Ed. Gurney, A. A. McMichael and A. F. McLaren.

MR. GURNEY'S THOUGHTFUL SPEECH.

Mr. Gurney said: "Mr. Chairman and gentlemen, I have no intention of singing a song, and I cannot make very much of a speech; but I think the man who can speak at all should speak under to-night's peculiar associations. In looking into your faces I see men who have been associated with me not only in regard to money matters, but in the solution of many problems not only in regard to sanitation but in regard to heating. I have been greatly interested in the changes which have taken place in business methods.

"A few years ago, in passing through Buffalo, I met some men who were trying to form an association. They told me that competition with one another had become so keen, and their lack of confidence in each other so great, that they could not find a man who was, in their opinion, honest enough to appoint president. They then asked me, although a foreigner, to be their president. (Laughter.)

"This state of affairs has changed. We have come to know that association in business is not only a good thing from a monetary point of view, but it has a deeper significance than that. It takes away that harshness so common in business and gives to men a relationship which they otherwise could not experience. (Hear, hear.)

"I may say, Mr. President, that the best friends I have in the world are men whom I have met in associations similar to this, and these associations have been formed among men from Maine to Texas.

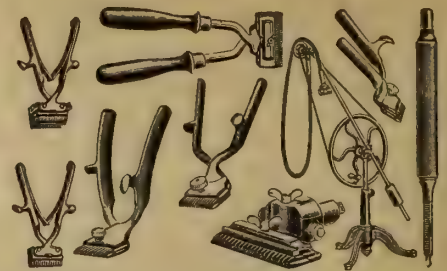
"Men have often said to me: 'Why do you not go out of business?' Gentlemen, the reason I do not go out of business is simply because by so doing I should lose something which could not be made up in any other association of men. (Hear, hear.)

"You men met here to-night can hardly understand the things which may be acquired by associations of this kind. We know that the savage held out his right hand and shook the hand of his enemy simply as a means of showing he had given up his weapon hand. When a savage leaves his weapon behind him it is significant. But, gentlemen, there is no more savage thing than for a man to hold himself aloof from such an association as yours, or who says he has nothing in common with the men in the same trade or occupation as he is. (Loud applause.)

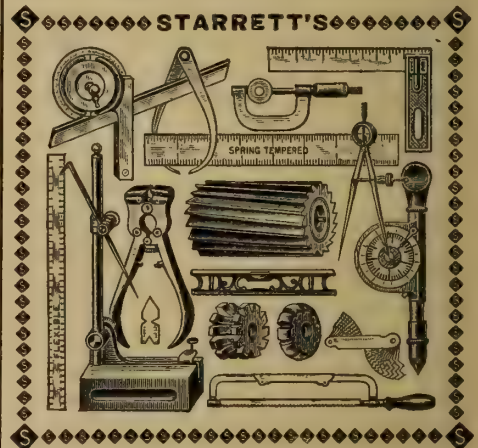
"I believe that the civilization of the next ten years will more than surprise the most of us. Sir, I believe that from a business point of view the meeting here to-night has made a great step towards deliverance from the feelings which grow out of competition.

"Now, sir, we have had during the past five or six years a peculiar experience. You can go down in the Southern States and throw nickels among the darkies, and the fight will be a beautiful one. (Laughter.) This is the kind of thing that is going on among the plumbers. (Hear, hear.) There has been a dollar upon the ground and we have had a hard fight for it. We are coming to a change. We are approaching times such as we have never seen before in the business of this country. There are many reasons for this.

"In Canada we have for years past hardly known whether we had a destiny or not. We hardly knew where to look, to the east or to the south. Gentlemen, we have now ceased to look toward the south. We are now looking towards the Motherland. (Tremendous applause.) Nothing was more marked in the Jubilee celebration in London than the figure of our Premier. (Hear, hear.) We have here sitting at my right a man of the same race (Mr. Lamarche.) A man whom I can look upon as my brother, as a Canadian before anything. (Applause.) Now sirs, we must look at business facts from a business standpoint. We have come to know something of the wealth of Canada. We have resources entirely beyond our comprehension. These resources are to be developed. Much presages good times when every plumber will have a dollar for himself." (Laughter.)



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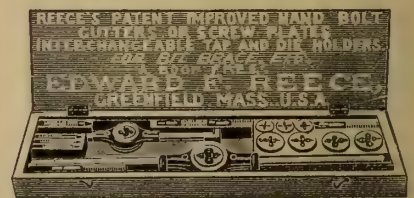
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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent" and "Prize Patent." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

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Successors to Henry Seymour Cutlery Co.

Office and factory . . .

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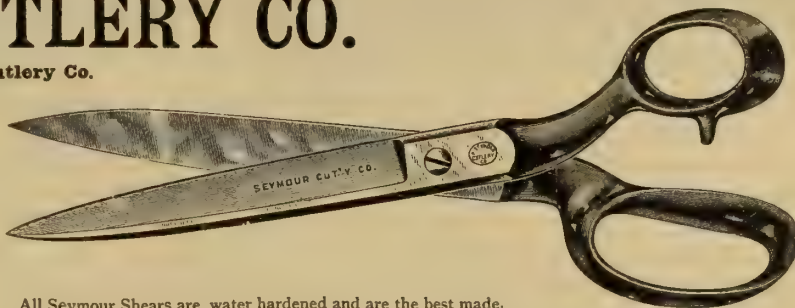
Every pair of Seymour Shears is fully warranted, and if found imperfect from any cause will be replaced with perfect shears.

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Shears, Scissors

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Sheep Shears



All Seymour Shears are water hardened and are the best made.

No commission house is sole agent for the genuine Seymour Shears. Write for catalogue and prices.

In closing, he referred to the fiscal policy of the Dominion, and asserted that as it was now settled capital could be with safety invested in the development of our natural resources and promoting our manufacturing industries.

As Mr. Gurney took his seat there was a spontaneous outburst of enthusiasm followed by "He's a Dandy" and "See Him Smiling."

Mr. A. A. McMichael, of the James Robertson Co., Limited, declared he would not make a speech or sing a song, but he called upon Mr. Curran to perform the latter duty.

Mr. McLaren disclaimed any intention of making a speech, "but," he added, "you who know me know that I am thoroughly in accord with the plumbing trade, and I hope the day is not far away when we shall all get that dollar which Mr. Gurney has spoken of." (Laughter.)

"Our Guests, National Delegates and Visitors" was the next toast, the names of ex-President Lamarche and Mr. Curry, of the Architects' Guild, being given as responders.

FRENCH-CANADIAN, BUT —

Mr. Lamarche, after a few introductory remarks, said: "As I told you before, I am a French-Canadian from the word go. (Hear, hear). But I am a British subject, and a Canadian above all things. (Loud applause). In speaking I only wish I could express all I feel; but let me tell you gentlemen, that it pleases me very much to be able to have an opportunity of thanking you most cordially for the toast that

honors us to night. I remember that a year ago we were holding our first meeting in Montreal. The meeting was similar to this one, with the exception that there were not nearly as many present. And I believe there was not so much enthusiasm. I really then did believe that Montrealers excelled, but I find this evening that you are outdoing anything before attempted as master plumbers. Meetings like the one we had in Montreal last year and meetings like the one we had in Toronto this year are meetings which contribute a great deal to make us, over and above everything else, Canadians. (Loud applause.)

"Allow me to tell you, Mr. Chairman, that I am glad to be here and have an opportunity of meeting not only our craftsmen, but also the men with whom we deal. These supply men and manufacturers honor us with their presence, and it is at meetings of this kind that we learn to know and sympathize with each other. The association was formed exactly for what Mr. Gurney said a short time ago. I believe him. I take him at his word. And I hope in our association we shall never ask for anything else but what is right. All we want is to join hands and work together in the interests of the public. We want the dollar, but we want to get it honestly. I have to thank you for the way in which the Canadians from the Lower Provinces have been received in this city of Toronto. We have had a very enjoyable time. Although French-Canadians, no distinction was shown. We had only one end to gain.

He then referred to his retirement from the presidency, and added, pointing to his successor, Mr. Joseph Wright: "The king is dead; long live the king."

"He's a jolly good fellow," and other approving remarks were accorded Mr. Lamarche as he took his seat.

Mr. S. G. Curry, of the Architects' Guild, also spoke to the toast.

The toast "Local Master Plumbers," was responded to by Messrs. Joseph Wright and J. B. Fitzsimons.

"The Entertainment Committee" was the next toast. Coupled with it were the names of Mr. Anthes, of the Toronto Foundry Co.; Mr. Adam Taylor, of the Toronto Radiator Co., and Mr. A. G. Booth, of the Steel-Clad Bath Co., Limited.

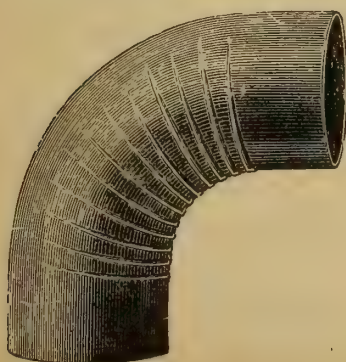
Messrs. Fred. Armstrong and Alcock spoke for "The Ladies."

Then the health of Mr. Burroughes, on the proposition of Mr. Lamarche, was drunk, and the banquet was over.

AT THE FALLS.

On Saturday the delegates, manufacturers and supply men visited Niagara Falls. The day was a perfect one. Dinner was partaken of at the Dufferin cafe, where speech-making was also indulged in. President Wright was in the chair, and in the seat of honor at his right was Mayor Cole, of Niagara Falls, and a brother plumber, by the way. After dinner the delegates were taken in charge of by the Entertainment Committee and driven to the various points of interest at the Falls and vicinity.

ESTABLISHED 1890



ELBOWS PLEATED



Made for 5, 6, 7 inch stove-pipe in Standard grade; also cheap line shorter and lighter than Standard.

WRITE FOR PRICES.

Also STOVE-PIPES, COAL HODS, STOVE BOARDS, Etc.

The THOS. DAVIDSON MFG. CO., Limited - MONTREAL

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, July 9, 1897.

HARDWARE.

THE week has furnished several interesting features in the matter of changes in value, as will be noted below. Barbed wire has been reduced sharply to meet the competition of stocks of United States wire now in jobbers' hands. Cut nails have been reduced for the same reason, and leading makers have made substantial modifications in their plain wire list, as will be seen elsewhere. Business also in many lines has ruled quite active, especially in screws, bolts, ironware, etc.

BARBED WIRE—The price of barbed wire has been cut sharply lately to meet the competition of stocks of United States wire which are now in hand. The basis now is \$2.25 f.o.b. Montreal, or a cut of fully 35c. on the Quebec basis.

PLAIN WIRE—There have been reductions in this also and some of the leading makers have issued a new list, which is referred to elsewhere. Discounts have also been increased 5 per cent., now being 30 and 5 f.o.b. Montreal for Quebec, and the same discounts in Ontario with a freight allowance of 20c. in that province.

WIRE NAILS—Continue unsettled as to value, and it is claimed that orders have been freely accepted at \$1.90 f.o.b. Montreal for straight lots, while in a small way we quote the base price \$2.

CUT NAILS—There has been a substantial reduction in the price of cut nails consequent upon changes in the Pittsburg basis, and we now quote \$1.85 basis less 10c. to dealers for Ontario and Quebec f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Business is quiet and discounts unchanged at 50 per cent.

HORSESHOES—There has been a fair enquiry for horseshoes. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—Are moving out well. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Discounts are not settled on this line, but 12½ per cent. is a fair average.

BOLTS—Demand has continued good for bolts. Discounts are: Common bolts, 70;

full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—The same remarks apply to rivets, which are in good enquiry. Discounts on iron rivets, black and tinned, up to 2½ lbs., and all other sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—Business has been fair and prices steady. We quote as follows: Sisal, 7-16 and upwards, 5½c.; ¾, 6c.; 5-16 and ¼, 6½c., and 3-16, 7c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—There has been a fair enquiry for these, with discounts 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—Continue as last noted, \$29.50 to \$31.50, as to brand.

ICE CREAM FREEZERS—Have been asked for to a fair extent.

HARVEST TOOLS—The enquiry for harvesting implements of all kinds is well maintained.

SPADES AND SHOVELS—There is a quiet business doing.

BUILDING PAPER—Trade continues fairly brisk. We quote: Plain building, 30c. tarred lining, 40c.; and do. roofing, \$1.40.

LEATHER BELTING—There has been a

good enquiry for this line. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—Iron and enamelled ware have been in good demand, chiefly preserving kettles.

HINGES—There is a steady demand for these. We quote as follows: Screw hook and hinge, 6 to 10 inch, \$3.40 to \$3.50 per 100 lbs.; 12 inch up, \$2.40 to \$2.50 per 100 lbs. Discount on T and strap hinges, 70 per cent.

WIRE CLOTH—A fair enquiry is noted for wire cloth and screen doors and blinds.

CUTLERY—Good sorting orders are noted for cutlery.

SPORTING GOODS—Trade much the same as it was last week.

SHOT—As last reported. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

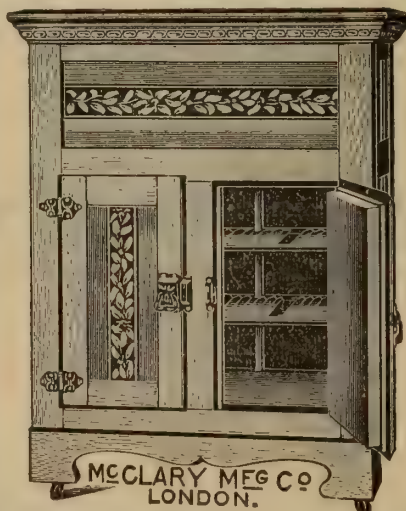
CEMENT—There has been a good enquiry for cement, and prices are steady at \$2 to \$2.10 for English, and \$1.90 to \$2 for Belgian.

FIREBRICKS—Continue in fair demand at \$16 to \$21 per 1,000, as to brand.

METALS.

The movement in heavy iron and metals has been extremely limited, while values on several leading lines are lower as a conse-

A GOOD Refrigerator



is a comfort while a poor one is not worth house room. We guarantee ours satisfactory.

Made of seasoned hardwood strongly put together and handsomely carved. Zinc lined and charcoal sheathed. Bronze locks and hinges, strong and of unique design. Ice racks and provision shelves strong and serviceable. Entire refrigerator easily cleaned.

The system of circulation, ventilation and insulation ensure a pure, dry, cold air.

Seven different sizes, with ice capacities from 25 lbs. to 180 lbs.

We have also a small quantity 1895 patterns, family size, which we will sacrifice at \$12.00 each.

The McCLARY MANUFACTURING CO.

London Toronto Montreal
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A GOOD NAME

is worth much to the man who bears it.
It is the same with metals. If you see
the name

DOMINION



on Iron, Steel, Tin Plates, Canada
Plates, or any other Metal, it is a guar-
antee of best quality and moderate price.

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Iron and Steel Merchants and Manufacturers' Agents.

Portland Cement

English, Belgian, German,
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PLATE GLASS

THE BEST AND PRICES THE LOWEST
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Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in
all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs,
Boxing Gloves, Punching Bags, Base-
ball Goods, Camp Sets, Folding Furni-
ture, Hammocks, etc., etc.

Send for Catalogue B.

**The Wightman
Sporting Goods Co.**

403 St. Paul St.

MONTREAL

quence of greatly replenished stocks and a
slow demand.

PIG IRON—There is little doing in pig
iron, and prices are unchanged. We
quote as follows: Hamilton, \$16 for No. 1,
and \$15 for No. 2; Ferrona, \$14 to \$15; Sie-
mens, \$14 to \$15; Summerlee, \$17 to \$18;
Carron, \$17 to \$18; Ayrson, No. 1, \$16;
Eglinton, \$16 to \$16.50; and Carnbro',
\$16 to \$16.50.

BAR IRON—It is distinctly a buyers' mar-
ket for bar iron, and even our inside figure
might be shaded in the case of a round lot.
We quote \$1.35 to \$1.40.

BAND IRON—Continues as last noted at
\$1.75 base.

HOOP IRON—As last reported at \$2.25.

SHEET STEEL—With increased stocks
prices have been reduced 15c. per 100 lbs.
to \$2.35.

SHEET IRON—There has been a sharp
decline in sheet iron of 25c. per 100 lbs. to
\$2.25 and demand is slow at the lower
level.

GALVANIZED IRON—A fair jobbing en-
quiry is noted. We quote \$4 to \$4.25.

TINNED IRON—A quiet trade is passing
on the basis of \$5.50 up to 20 gauge.

LEAD PIPE—Has continued in good en-
quiry with values steady at 7 to 7½c., with
30 and 5 off.

PIG LEAD—Advices from abroad continue
firm on pig lead and prices here are firmly
held at \$3.35 to \$3.50.

INGOT TIN—Firm and unchanged at 16c.

INGOT COPPER—Dull with a heavy
tendency at 12 to 12½c.

SHEET COPPER—Moving fairly well in
a jobbing way at 14½ to 16c.

IRON PIPE—Values are unsettled, and
different sellers have different figures. We
quote from \$1.87 on ¼ inch to \$7.87 on
2 inch black iron pipe; galvanized, from
4c. on ¼ inch to 11½c. on 1½ inch.

CANADA PLATES—Increased supplies of
these and no improvement in the demand
have induced a sharp decline in price of 10
to 30c. per 100 lbs., the basis now being
\$2.20.

TIN PLATES—Without change. We
quote: Coke I.C., \$3 to \$3.20; char-
coal, I. C., Allaway, \$3.25; do, I.X.,
\$3.90 to \$4.00; P. D. Crown, I.C., \$3.80;
do, I.X., \$4.50.

BOILER PLATE—Rules steady at \$1.90
to \$2.

SOLDER—Quiet and unchanged at \$5 to
\$5.25.

SPELTER—Frm and unchanged at \$4.50
to \$4.75.

ANTIMONY—Featureless at 9½ to 10c.

SCRAP IRON—No further business of im-
portance was noted. We quote: \$12 to
\$12.50.

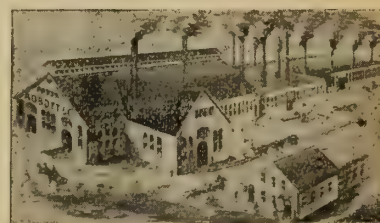
Cattle Ties

Do not purchase before seeing
our samples and prices. Our
Ties are the lightest, strongest
and best, and most satisfactory
line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



AND FACTORIES
MONTREAL

Rhode Island Pattern Horseshoes.

Correct Shape. Quality Guaranteed.

NOVA SCOTIA STEEL CO.

Limited

NEW GLASCOW, N.S.

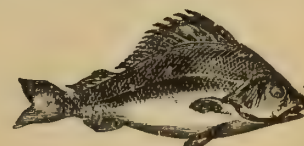
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When
you buy from us you buy
from the largest makers
and oldest house in Eng-
land. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

PAINTS AND OILS.

The white lead market has developed considerable improvement since our last issue. Makers of dry have further advanced their prices, making the rise within the last few months equivalent to 5 per cent. We find quotations for white lead in oil continue unaltered, but the feeling is firm, with the probability of an early advance. Demand for mixed paints of all descriptions continues heavy and prepared paints represent an increasing proportion of the whole trade year by year. Linseed oil is easier, with a downward tendency. Turpentine also gives an indication of weakness.

WHITE LEAD—Demand good and prices very firm. Government standard, \$5; No. 1, \$4.62½; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—Continues strong at last quotation, viz., 4c. in casks 4¼c. in kegs.

LIQUID PAINTS—In good demand for all varieties.

SHELLAC—Unchanged at 25c.

PARIS GREEN—As before, 13½c. in drums and 14½c. in packets.

LINSEED OIL—The feeling is easier and reduction in price probable. Meantime quotations nominally are: Raw, 42c.; boiled, 45c. with 5-barrel lots 1c. less per gallon.

TURPENTINE—In good demand, but with lower prices at points of production present quotations may shortly be shaded. In the meantime holders quote 42c. in single bbls., and larger lots 41c. nett.

VARNISHES—Fairly active at prices quoted in our prices current.

SEAL OIL—Unchanged at 40c.

COD OIL—Dull at 31c.

NAVAL STORES—Steady. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c½; for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There is no change in the glass market. We quote first break, \$1.25; second break, \$1.35 per 50 feet; third break, \$2.80 per 100 feet.

ASHES.

Quiet at \$3 to \$3.10 for first pots, and \$2.80 to \$2.85 for seconds, and \$4.40 for pearls.

CHEMICALS, ETC.

Rule quiet and steady. We quote as follows: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Beef hides have declined 1c. to 7c. for No. 1; 6c. for No. 2, and 5c. for No. 3.

PETROLEUM.

Rules steady. We quote: Canadian, in car lots, 13½c.; smaller quantities, 14½c.; American prime white, car lots,

17c.; smaller 18c.; water white, car lots, 18½c.; smaller, 19½c.; Pratt's astral, car lots, 20½c., and smaller, 21½c.

COAL.

Dull and unchanged. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Arrivals of cement last week were 1,000 bbls. English.

Receipts of firebricks at this port were 186,000 during the past week.

There has been a decline of 15c. per 100 lbs. in the price of sheet steel.

There is an easier feeling in linseed though no quotable decline is to note.

Cut nails have been marked down 5c. per keg in a jobbing way to \$1.85.

The barb wire basis has been reduced 35c. to \$2.25 to meet American competition.

Sheet iron is 25c. lower than it was a week ago, and Canada plates are 20c. below what they were.

There is an active demand from jobbers for hockey skates at present, and they expect a big business during the ensuing season.

ONTARIO MARKETS.

TORONTO, July 9, 1897.

HARDWARE.

THE activity in trade noted last week has been well-maintained. The feature of trade is the reduction of 10c. per keg in the price of cut nails and of 30c. per 100 lbs. in barb wire. Assorted cut tacks are also a little cheaper and a reduction is announced in certain sizes of barn door hinges. As announced elsewhere a change has been made in the list on files, an advance in price having taken place in several lines. Orders for wire nails are, if anything, coming in more rapidly than before although the price is unchanged. Trade in cut nails is still quiet. An increased business is to be noted in both horseshoes and horse nails. Screws, bolts, rivets and burrs are still going out freely. Harvest tools are in exceptionally good demand, Leather belting is not as active as it was last week. Business in tinware and enameled ware is good. Generally speaking, trade is improving and payments are reported fairly good.

BARB WIRE—A material reduction has

been made in the price of barb wire, the association having dissolved. We now quote: \$2.20 f.o.b. Toronto, Montreal, London and Hamilton. Terms are as before, namely, 60 days, or 2 per cent. off 30 days.

WIRE—A radical change has been made in the list. Bright and annealed is now listed the same. Oiled and annealed calls for an extra 5c. per 100 lbs. net over the price of bright and annealed only. Coppered spring is now 75c. per 100 lbs. instead of 50c. on the list as before. The discount has been changed, now being 35 per cent. off the revised list. Terms are as before, namely 4 months, or 3 per cent. off 30 days. Trade can only be termed steady.

WIRE NAILS—The price is unchanged. Orders are coming in a little more freely than a week ago. We quote base price at \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—The base price has been reduced 10c. per keg, the figure now being \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade has somewhat increased during the week. The discount is unchanged at 50 per cent.

HORSESHOES—Also show a slight improvement in the way of business, although it is not to any great extent. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—The demand is still active and prices steady and unchanged. Discounts are now: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Business is quiet. Discounts, 12½ per cent.

BOLTS—Business in this line continues active, with discounts as before. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage

Binder Twine. HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

PLYMOUTH	-	-	-	-	-	}	TWINES
CENTRAL PRISON	-	-	-	-	-		
CONTINENTAL TWINE CO.'S	-	-	-	-	-		
DOMINION GOVERNMENT	-	-	-	-	-		

... We Offer

The "Eastlake" Patent Shingle

The only original shingle fastened with a cleat and having a telescopic side lock and concealed water gutter.

Beware of Cheap Imitations.



SHOWS ONE SHINGLE.

The Eastlake Shingles are made from Galvanized or . . . Painted Steel of the

Finest Quality Only.

IMPORTANT INFORMATION

When you purchase a bushel of wheat you expect to get 60 lbs., no matter what grade it is, because that is the standard weight fixed by law. There is no law saying what metallic shingles shall weigh, and the only safe rule is to demand from manufacturers of these goods a list of weights, and see that goods you buy fully come up to this.

If one maker sells you goods guaranteed to weigh 80 lbs. at \$3.20 per square, that is 4c. per lb.; if some one else offers you goods claimed to be "just the same" at \$3.00 per square, his goods may only weigh 70 lbs., and this at the same rate (4c. a lb.) should only make the price \$2.80 per square. Thus the shingles claimed to be "just the same" are 20 cents per square higher than the guaranteed goods, made by an honest maker, out of honest materials, by honest workmen.

MORAL: Deal only with honest, reliable makers, who have some reputation and capital at stake.

We believe that constant attempts are being made to deceive the public who do not happen to be judges of the various roofing and siding plates made by different makers, and we therefore wish to point out to you that the **APPROXIMATE AVERAGE WEIGHTS** of the goods made by us are as follows, **EXCLUSIVE OF THE PACKAGES:**—

GALVANIZED "EASTLAKE" SHINGLES.

No. 1 grade, 105 lbs. per square.
No. 2 " 94 " "
No. 3 " 82 " "

PAINTED "EASTLAKE" SHINGLES.

No. 1 grade, 93 lbs. per square.
No. 2 " 83 " "
No. 3 " 70 " "

**THE BEST
IS THE
CHEAPEST**

BRICK OR MANITOBA SIDING PLATE.

No. 1 grade, 77 lbs. per square.
No. 2 " 68 " "
No. 3 " 57 " "

**THE BEST
IS THE
CHEAPEST**

All the Above Weights are Exclusive of the Packages.

We do not guarantee that all sheets are of exactly the same thickness, as it is impossible to supply all sheets exactly alike; the above weights are, however, the approximate average weight per square, so that you see exactly what we are offering you, **QUALITY, WEIGHT AND SUPERIOR CONSTRUCTION** being our first consideration. We do not aim at selling the lowest priced goods in the market, but do aim at selling the **BEST**.

Kindly take the above facts into your consideration.

We are the original makers of metallic goods in Canada, and make and sell more than all others combined.

If you want to know why, write us and we will tell you.

The Metallic Roofing Co. of Canada, Limited

Cor. King and Dufferin Sts.

TORONTO, ONT.

bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, $\frac{3}{4}$ and larger, 4c. per lb.; 5-16, 5c. per lb., $\frac{1}{4}$, 6c. per lb.

BRASS BUTTS—There is no change to note and discounts are as before, 17½ per cent.

RIVETS AND BURRS—Business is still brisk, although not many orders for tinned rivets are being received.. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto; 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Trade is about the same as last week, but no large orders are being received. We quote: Sisal, 7-16 in. and larger, 5¾c.; $\frac{3}{8}$ in., 5¾c.; $\frac{1}{4}$ and 5-16 in., 6¾c.; 3-16 in., 6¾c. Manilla, 7-16 in. and larger, 7¾c.; $\frac{3}{8}$ in., 7¾c.; $\frac{1}{4}$ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Business in this line is quiet. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Continue quiet. We quote: "Lightning," \$31.50 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—Trade has been exceptionally good, and jobbers have found it difficult to supply the demand. Express orders have been quite frequent during the week. Discount, 60 and 10 per cent.

SPADES AND SHOVELS—Trade in this line has, perhaps, not been as active as during the past few weeks. Discount, 45 per cent.

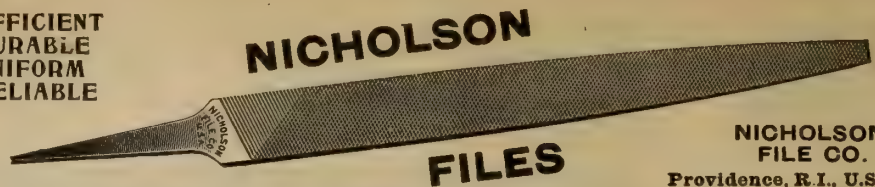
BUILDING PAPER—Quite an improvement has developed in this during the week. Prices are as before. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—The improvement noted last week was not maintained, business being quieter. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—Trade is good in both tinware and enamelled ware, the latter being particularly brisk.

HINGES—A reduction has been made in the smaller sizes of barn door hinges; 6 to 12 inch, inclusive, are now quoted at \$3.15 per 100 lbs., and 14 inch and upwards at

**EFFICIENT
DURABLE
UNIFORM
RELIABLE**



**NICHOLSON
FILE CO.
Providence, R.I., U.S.A.**



Guaranteed to be the Best Preservative of Metals. Not Vaseline. Will retain its form in any climate. Not affected by heat or cold. Will NOT grow RANCID. Least required to coat work thoroughly. Use it to protect your tools. Large Tube and Best Quality. A Superior Lubricant for Bicycle Chains and Metals. Write regarding this or the best Repeating Rifles to

THE MARLIN FIRE ARMS CO., New Haven, Conn., U.S.A.



To Whet a Scythe...

properly requires a good
Scythe Stone.

**Pike's BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively **Scythe Stones**
the best on earth.

Pike's Lily White Washita OIL-STONE
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

\$2.35. Business has been active, being especially so in barn door hinges.

CUTLERY—Nothing new has developed in this line, trade being only of a moderate sorting-up character.

SPORTING GOODS—Business in this line does not show any perceptible improvement.

SCREEN DOORS AND WINDOWS—Jobbers still find it difficult to supply the demand, manufacturers only being able to partially fill orders forwarded to them.

POULTRY NETTING—Business is still only fair. Discount, 67½ per cent.

GREEN WIRE CLOTH—This article is still going out steadily at \$1.35 per 100 square feet.

GARDEN HOSE—Business continues fair. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—Trade is moderate, with an anticipated improvement. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

Pig iron is stiffening a little, and pig lead shows a further advance. Business, if any-

thing, is a little more active in metals generally.

PIG IRON—The tendency during the past week has been towards better prices. Business, however, is quiet. We quote: Hamilton No. 1, in 100 ton lots, \$15 per ton No. 2, \$14.50; Southern soft, \$15.50 for No. 1, and \$15.15 for No. 2; Southern foundry, \$15.75 for No. 1; \$15.25 for No. 2, and \$15 for No. 3; Niagara, No. 1, \$14.80; No. 2, \$14.30.

BAR IRON—A new list of extras on bar iron was issued on Thursday. It is the first for over four years. We still quote base price at \$1.40 in carload lots and \$1.50 in smaller quantities. Business has improved, and a fair number of orders are being put through.

HOOP AND BAND IRON—Business is quiet and prices unchanged at \$2.25 per 100 lbs.

SHEET STEEL—Trade during the past week has been good. We quote as follows: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Business is fairly active.

SOIL PIPE AND FITTINGS SINKS AND BOILER STANDS

We are the only firm in Canada exclusively manufacturing these goods. All our time and energy are concentrated upon these lines and we have brought them to the highest state of perfection. Samples may be seen at the jobbing houses and we will be pleased to have you inspect them. Correspondence solicited.

TORONTO FOUNDRY CO.

146-150 Niagara Street

TORONTO

We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade shows some improvement and prices remain as before. We quote: Queen's Head (case lots), 16 gauge, 3 $\frac{3}{8}$ c.; 18 to 24, 3.75c.; 26, 4c.; Gordon Crown (case lots), 28 gauge, 4 $\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, 3 $\frac{3}{4}$ c. per lb. American (ton to $\frac{1}{2}$ -ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are $\frac{1}{8}$ to $\frac{1}{4}$ c. per lb. higher than figures named.

TINNED IRON—Trade is much about the same as a week ago. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.13; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4 $\frac{3}{4}$ c.; extra large sizes, 6 $\frac{1}{2}$ to 7 $\frac{1}{2}$ c. per lb.

LEAD PIPE AND TRAPS—Business has been fairly well maintained. We quote: Lead pipe, 7c.; lead waste, 7 $\frac{1}{2}$ c.; discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—The improvement noted last week has continued. Discount, 60 and 10 per cent.

PIG LEAD—A few good sales have been made during the week. Prices are fractionally higher, imported now being quoted in ton lots at 3 $\frac{1}{2}$ c. per lb., and in smaller quantities at 3 $\frac{3}{4}$ c. per lb.

INGOT TIN—Has been in fair demand during the week at 16 $\frac{1}{4}$ to 16 $\frac{1}{2}$ c. per lb.

INGOT COPPER—Trade has ruled quiet. We quote: 11 $\frac{3}{4}$ c. for quantities and 12 $\frac{1}{4}$ c. for small lots.

SHEATHING COPPER, ETC.—The situation is much about the same as a week ago. We quote: Sheathing copper, 14 $\frac{1}{2}$ to 16c. according to weight and quantity; braziers', 15 $\frac{1}{2}$ to 17 $\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—While few if any large lots are moving, ordering being for small quantities, a fair business is being done. We quote per 100 feet net: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ -inch, \$1.87; $\frac{1}{2}$ -inch, \$2.10; $\frac{3}{4}$ -inch, \$2.45; 1-inch, \$3.40; 1 $\frac{1}{4}$ -inch, \$4.50; 1 $\frac{1}{2}$ -inch, \$5.87; 2-inch, \$7.87. Galvanized, $\frac{1}{2}$ -inch, 4c.; $\frac{3}{4}$ -inch, 4 $\frac{3}{4}$ c.; 1-inch, 6 $\frac{3}{4}$ c.; 1 $\frac{1}{4}$ -inch, 10 $\frac{1}{4}$ c.; 1 $\frac{1}{2}$ -inch, 11 $\frac{1}{2}$ c.

RANGE BOILERS—Business continues moderate. We quote: Galvanized, 30 gallons, \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Orders are coming in a little better, but only for small lots, as most of the dealers throughout the country have placed orders for import. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$3.

TIN PLATES—Trade is about the same as last week. A few round lots were reported during the week. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COLD CHAIN—The demand has been a little better during the past week. We quote: $\frac{1}{4}$ in., 4 $\frac{3}{4}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Business keeps fair. We quote: Imported, 5 $\frac{1}{4}$ c. in ton lots, and 5 $\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Only a few enquiries have been received during the week. We quote: IC, \$6.25 to \$6.50; IX, \$8.

SOLDER—Trade is still fair. We quote: Standard, 10 $\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Business is much about the same as a week ago. We quote: Cookson's, 8 $\frac{3}{4}$ to 9c.; other makes, 8 $\frac{1}{4}$ to 8 $\frac{1}{2}$ c.

OLD MATERIAL.

Trade has not improved to any extent. The American import duty on rags has stopped the export of Canadian rags to the

States. The dealers contend, however, that all the Canadian rags will be used by the Canadian mills now that many foreign rags have been excluded, and that prices will be no easier. Business in the finer metals continues to be fairly brisk. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42 $\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7 $\frac{3}{4}$ c. per lb.; bottoms, 7 $\frac{1}{2}$ c.; heavy copper, 7 $\frac{3}{4}$ to 8 $\frac{1}{4}$ c.; light scrap brass, 4 to 4 $\frac{1}{2}$ c.; heavy yellow scrap brass, 5 $\frac{1}{2}$ c.; heavy red scrap brass, 6 $\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to 3 $\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

Trade in glass is moderate. Diamond glass is moving fast. There is no alteration quotable although prices are stiffening. We quote window glass: First break in 50-foot boxes, \$1.20 to \$1.25, and in 100-foot boxes, \$2.30 to \$2.40, Toronto, Hamilton and London.

PAINTS AND OILS.

Owing to the lateness of the season business maintains a good deal of its spring briskness. The demand for liquid paints and white lead has been a pleasant surprise to some of the dealers. Orders for paris green have been more frequent this week than for several weeks. Most of these orders are for small lots to complete the season. Although the prices of linseed oil and turpentine are open, there is no alteration from our last week's quotations.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77 $\frac{1}{2}$; No. 2, \$4.40; No. 3, \$4.02 $\frac{1}{2}$; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.
WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.
GUM SHELLAC—24c.
SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.
PLASTER PARIS—\$1.90 per barrel.
CASTOR OIL—In cases, $8\frac{1}{2}$ c. per lb. and 9c. for single tins.
SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.
LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12 $\frac{1}{2}$ -lb. tins, 8 in case, \$2.45.

PARIS GREEN—100-lb. kegs, 13c.; 50-lb. drums, 13c.; 25-lb. drums, 13 $\frac{1}{2}$ c.; 1-lb. cartoons, 14c.; $\frac{1}{2}$ -lb. packages, 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed)
Raw, 1 to 4 barrels, 43c.; 5 to 9 barrels, 42c.; Boiled, 1 to 4 barrels, 46c.; 5 to 9 barrels, 45c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above.

HIDES, SKINS AND WOOL.

HIDES—Cowhides: Dealers pay 8 $\frac{1}{2}$ c. for No. 1, 7 $\frac{1}{2}$ c. for No. 2 and 6 $\frac{1}{2}$ c. for No. 3. Steerhides: 60 lbs. and up, 8 $\frac{1}{2}$ c. for No. 1, 7 $\frac{1}{2}$ c. for No. 2 and 6 $\frac{1}{2}$ c. for No. 3.

CALFSKINS—Trade is brisk and prices are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Deatons, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins, 50c.; pelts, 25c.

WOOL—The price of wool has at last settled, and dealers are now paying 19 to 20c. There is a lull in trade after the large exports of last week.

PETROLEUM, ETC.

Oil dealers have prepared for the annual trade in harvest machine oils. The hay cutting is just about to start, and, from now on, the demand for lubricating oils will be heavy. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14 $\frac{1}{2}$ c.; carbon, safety, 16 $\frac{1}{2}$ c.; Canadian water white, 17c.; American water white, 17 $\frac{1}{2}$ c.; Pratt's astral, 17c. in bulk.

COAL.

Trade is still dull. Prices are this week quoted 25c. higher. Anthracite is quoted

at Buffalo and bridges: Grate, \$4.26; egg, \$4.49; stove, \$4.29; chestnut, \$4.29.

MARKET NOTES.

Coal is 25c. per ton dearer.

A new list has been issued on wire.

Cut nails are \$1.85 per keg base, a decline of 10c.

Barb wire has been reduced to \$2.20 per 100 lbs.

A new list has been issued on bar iron and steel.

Another fractional advance has taken place in the price of pig lead.

A reduction has been made in the price of the smaller sizes of barn door hinges.

Stewart & Wood have a shipment of double diamond glass coming in next week.

Rice Lewis & Son, Limited, are putting a nice line of bronze hardware on the market.

In spite of the decline in the price of bicycles a Toronto firm has just received an order for parts necessary to manufacture 500 wheels.

The employees of the Gurney Foundry Co., Limited, Toronto, left to-day on the Garden City for Prospect Park, Oshawa, on their annual excursion.

TRADE IN WINNIPEG.

The increasingly warm weather has helped the sale of refrigerators and ice cream freezers, and the retail trade is on the whole fully up to, if not a little ahead of, last year at the same period, but still things are very quiet. Building operations this year have been limited to the erection of a few large blocks, and a still fewer number of good residences. In fact, all the money in the country seems to have been put into gold mines or bicycles. Prices remain unchanged from last week.

ADVERTISING TIP.

Some merchants think, it's very clear,
That advertising is a nut,
A very hard one, too, they fear,
It may, in time, be opened, but—
May be the meat will not be good.
They try a little ad.—one line,
Then if returns are not immense,
"I told you so: the work's were mine,
'Twas nothing but a fool expense,
I always said 't would do no good."

PERSONAL MENTION.

Mr. John M. Taylor, manager of the Toronto Radiator Co., Limited, who has been in Europe for some months, is on the Atlantic en route home.

Mr. Frank D. Benjamin, of M. & L. Samuel, Benjamin & Co., Toronto, returned from Europe on Thursday. He was accompanied by Mrs. Benjamin.

Mr. R. A. Somerville will on Monday start out upon the "road" for the Ontario Lead & Barb Wire Co., Limited. His territory will be northern Ontario.

TRADE CHAT.

THE merchants in and about Halifax are beginning to evince their dissatisfaction at the continuation of the 50 per cent. discount on American money charged by Halifax banks. At Middleton, Yarmouth and other places only $\frac{1}{2}$ per cent. is charged, and the question is asked, Why do the Halifax banks not do likewise? When people have American money they are very chary about spending it at a loss of 5 per cent., and thus the Halifax merchants claim to lose a certain amount of custom.

Customs receipts at London last month were \$29,944.42, compared with \$29,489.21 in June, 1896.

An electric plant is being installed in the Clarendon Hotel, Winnipeg. Mr. Laycock, of Toronto, is superintending the work.

Mr. Wm. Wilson, formerly with the Stevens Manufacturing Co., has secured the sole right for the county of Middlesex to handle the great Moorlaph puncture preventive.

The fire at the Central House stables, London, last Friday night, cost Westland & Sons, painters, the loss of about \$50 worth of tackle, which had been used in painting the Massey-Harris building.

The Stacey Hardware Mfg. Co., St. Thomas, have received the following contracts for their celebrated furnaces: E. Penwarden, new house on East street; Hy. Lindop, cottage on St. George street; G. H. White, house on Wellington street.

It was with glad hearts the majority of our people welcomed the news that the Ontario Malleable Iron Co. had commenced preparations for rebuilding their works here. The foundation is being prepared and a large water tank 40 x 40 and 8 feet deep is being built. When the shops are finished there will be no finer on the continent.—Whitby Chronicle.

The professor of mechanics at an English college records that he once gave a lecture upon the locomotive, and was particularly struck by the absorption of one juvenile listener. He spoke to this student after the lecture, and asked him: "Well, I suppose you understand all about the locomotive now?" "Yes," was the reply, "all but one thing." "And what is that?" said the professor kindly. "I can't make out what makes the locomotive move without horses."

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

WE ARE HEADQUARTERS FOR

Cavalier and Pelham Bicycles

Search Light and Midnight Sun Lamps

Standard Cyclometers and Tachometers

Christy Saddles, Myers' Stands

Builders' Hardware, Mechanics' Tools

CUTLERY, GUNS, AMMUNITION, IRON, GLASS and WIRE.

CAVERHILL, LEARMONT & CO. - MONTREAL

. . . Wholesale Hardware Merchants . . .

Winchester and Marlin Rifles

English, Belgium, and American

Breech-Loading Guns.

Revolvers, Large Assortment.

Loaded Shells,

U M C and Dominion.

Ammunition, Full Line.

Write for our new Sporting Goods Catalogue.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West **TORONTO.**

NEW LIST ON BAR IRON AND STEEL.

A NEW and revised list of extras on bar iron and steel has been issued. It bears date of July 7. It is the first list that has been issued for over four years, and has been necessitated by the altered conditions now existing. There is no fixed quotation for the base price. The following is the list :

REGULAR BASE SIZES, NOT EXTRA.

Round and square iron.....3-4 to 2 inches
Flat iron.....1 to 4 inches x 3-8 to 1 1-2 "
" ".....4 1-8 to 6 " x 3-8 to 1 "

SMALL ROUND AND SQUARE IRON, EXTRAS.

per 100 lbs.		per 100 lbs.	
5-8 and 11-16 inch..\$0 05	5-16 inch.....\$0 45		
1-2 and 9-16 " ... 15	1-4 " 60		
7-16 inch..... 25	3-16 " 1 25		
3-8 " 35			

LARGE ROUND AND SQUARE IRON, EXTRAS.

per 100 lbs.		per 100 lbs.	
2 1-8 to 2 7-8 inches..\$0 05	3 1-2 inches...\$0 40		
3 inches 20	3 3-4 " 50		
3 1-4 inches..... 30	4 inches 60		

SMALL FLAT IRON, EXTRAS.

	per 100 lbs.
1 to 6 inch x 1-4 and 5-16	\$0 15
1 to 6 inch x 3-16	0 30
7-8 x 3-8 to 3-4 inch	0 30
7-8 x 1-4 and 5-16 inch	0 35
7-8 x 3-16 inch.....	0 45
3-4 x 3-8 to 5-8 inch	0 30
3-4 x 1-4 and 5-16 inch.....	0 45
3-4 x 3-16 inch	0 60
5-8 x 3-8 to 1-2 inch	0 45
5-8 x 1-4 and 5-16 inch.....	0 60
5-8 x 3-16 inch.....	0 75
1-2 x 1-4 to 7-16 inch.....	0 75
1-2 x 3-16 inch.....	1 00

LARGE FLAT IRON, EXTRAS.

Per 100 lbs.									
Inches	3 to 6	7	8	9	10	11	12		
1-4 and 5-16.....15	.40	.50	.60	.70	.80	.90			
3-8 to 1 25	.40	.50	.60	.70	.80				
1 1-8 to 2 15	.40	.50	.60	.70	.80	.90			

BAND IRON NO. 10 GAUGE.

per 100 lbs.		per 100 lbs.	
1 to 6 inches.....\$0 30	5-8 inch.....\$1 30		
7-8 inch..... 0 50	1-2 " 2 00		
3-4 " 0 70			

Over 7 inches wide at special price, but not less than 60c. per 100 lbs.

OVAL IRON, EXTRAS.

per 100 lbs.		per 100 lbs.	
7-8 to 1 1-4 inches..\$0 30	1-2 to 9-16 inch..\$0 80		
3-4 to 13-16 " .. 0 45	3-8 to 7-16 " .. 1 00		
5-8 to 11-16 " .. 0 60			

HALF OVAL AND HALF ROUND IRON, EXTRAS.

per 100 lbs.		per 100 lbs.	
7-8 to 1 1-4 inches..\$0 40	1-2 to 9-16 inch..\$1 20		
3-4 to 13-16 " .. 0 60	3-8 to 7-16 " .. 1 40		
5-8 to 11-16 " .. 0 80			

CUTTING TO SPECIFIC LENGTHS.

When rolling, 10c. per 100 lbs.

Lengths over 20 feet, by special agreement.

HONORING A FELLOW TRAVELER.

A general meeting of the Commercial Travelers' Association of Canada was held in their rooms at 51 Yonge street, Toronto, on Saturday evening. The special feature

of the meeting, and which accounted for the representative gathering, was the presentation to Mr. Robert H. Gray, the retiring president of the association, of an illuminated address and an oil portrait of himself. Mr. Gray retired from the presidency at the general meeting in December last, after having held the office for two years. He has occupied a seat on the Executive for many years, acting in capacity of treasurer, subsequently as vice-president, and finally as president. His management of the affairs of all his offices has been most judicious, and has continually won praise from the Board of Directors. His portrait will be hung in the rooms of the association to keep in remembrance his genial personality and useful work.

HAMILTON BOARD OF TRADE.

The annual meeting of the Hamilton Board of Trade was held on Saturday afternoon, President W. A. Robinson in the chair, and a small attendance of members. The president read the Council's annual report, which stated that the board is getting out of debt. The citizens were congratulated on the city's increased railway facilities, the extension of the H., G. & B. Railway to Beamsville, and the completion of the Radial Electric Railway. The outlook for the year was regarded as hopeful, especially in reference to the crops. The financial statement showed receipts to have been \$1,076.67, and expenditures \$1,319.51, of which \$375 was payment of an old debt.

Officers were elected as follows: Mr. W. F. Findlay, president; Mr. Samuel Barker, vice president; Mr. C. R. Smith, secretary-treasurer. Council—Messrs. John Knox, W. H. Gillard, Geo. Roach, W. A. Robinson, M.P. Board of Arbitration—Messrs. B. E. Charlton, J. M. Lottridge, F. H. Lamb and W. C. Breckenridge. Mr. H.

N. Kittson gave notice of motion to have the date of the annual meeting changed from July to January. The retiring president was given a vote of thanks on motion of Messrs. H. N. Kittson and John Knox.

A QUESTION OF HOLIDAYS.

During the last couple of weeks I have heard considerable grumbling over the frequency of holidays; but on summing up the evidence I find that complaints come only from certain classes of merchants, chief among which are the transient traders and market merchants who depend on the farmers' trade. Other stores seem to almost double their receipts on the day preceding the holiday. This causes more work, and the increase of labor is again a subject over which a few lament. But it seems to me that those few were people who could not enjoy a holiday and who could not become enthused over their business, let alone a Jubilee or Dominion Day celebration. The live business man, on the other hand, seems only too glad to take advantage of the privilege. He is not content with the number of holidays we have, but as a general rule he makes Saturday afternoon a holiday in the summer months. I don't mean to say that he is so kind and benevolent to his clerks that he is willing to lose a half day's trade; it is his contention that the clerks will appreciate the holiday and will work with more determination and vigor the rest of the week, and that the public will do their purchasing at some other time. In many cases these retailers, too, close their stores at 6 o'clock in the evening, presumable for the same purpose.

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with Flint or Sand Papers.

BEST GALVANIZED BARB WIRE



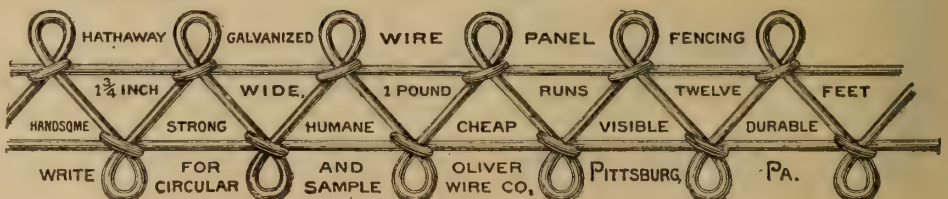
Cactus Interlocked



Genuine Glidden



Light Baker



Represented by

A. C. LESLIE & CO.

MONTREAL

OLIVER WIRE COMPANY

Pittsburgh, Pa.

A. ALLAN, President.
J. O. GRAVEL, Sec. -Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
.. Manufacturers of the ..

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

... **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage
Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS

Are You Interested in GAS RANGES?

If you are, it will pay you to place an

OXFORD ON
YOUR
FLOOR

They will increase your Trade

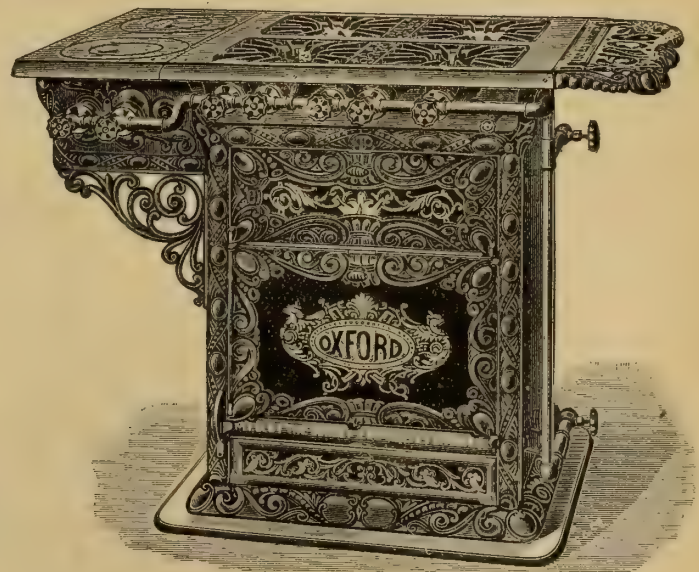
Features . . .

Largest Oven Made.
Spring-Balanced Drop Oven Door.
Flush Top Surface.
Removable Griddles over each Burner.
Improved, Powerful Cast Iron Burner and Tube.
Instantaneous Oven Burner Lighter.
Bodies Japanned and Baked Inside and Outside and Asbestos Lined.
Powerful Water Heater.
Very Economical in Consumption of Gas.
Perfectly Adjusted Needle Point Valves.
Simmering Burner with Each Range.

DRILLED OR SAWED BURNERS, AS DESIRED.

We manufacture this range with Single Oven, Single Oven and Water Heater, Double Oven (one Roasting and Baking Oven, and one Broiling and Toasting Oven), and Double Oven and Water Heater. We are the originators of this range with **BROILER OVEN ON TOP**, the convenience of which will at once be appreciated.

Send for Illustrated Catalogue and Price List.



Baking Oven, 18 x 18 x 12.
Roasting Oven, 18 x 18 x 6.

THE GURNEY FOUNDRY CO., LIMITED, TORONTO

The Gurney-Massey Co., Limited, Montreal.

SOLE AGENTS FOR THE QUICK MEAL, GASOLINE AND BLUE FLAME SUMMER STOVES.

THE MINIMUM TARIFF AND NEW SOUTH WALES.

AN order-in-council was made a few days ago by the Dominion Government admitting the products of New South Wales to the privileges of the minimum tariff.

This means that until June 30, 1898, the products of the colony in question will be admitted at 12½ per cent. below the rate specified in the ordinary tariff known as schedule A, while on and after July 1, 1898, there will be a further reduction of 12½ per cent.

So far, Great Britain and New South Wales are the only countries which are deemed entitled to enjoy the privileges of the minimum or reciprocal tariff. And this is because both are practically free trade countries.

Unfortunately, the Trade Returns do not enable us to ascertain the value of our exports to, or our imports from, New South Wales. All are grouped under the word "Australasia."

Our total imports from Australasia during the fiscal year 1896 were valued at \$213,536, on which duty to the amount of \$5,686.87, or over 20¼ per cent., was paid. Our exports aggregated \$517,258. Of the total imports from Australasia \$26,586 were dutiable and \$186,950 free.

On the principle that low tariffs tend to stimulate international trade, the result of the admission of New South Wales to the privileges of the minimum tariff should be an increase in trade between the Dominion and that part of the British Empire.

New South Wales' imports average in round numbers over \$100,000,000 annually, inclusive of imports overland, which of late years have run from eight to twenty-two million dollars annually. These overland imports are largely, of course, from the other Australian colonies. The total exports of New South Wales run from about \$100,000,000 to \$126,000,000 annually.

New South Wales' chief exports, according to the latest returns we have to hand, are: Coal and coke, \$3,968,450; gold, \$10,233,552; hides and skins, \$2,751,278; unmanufactured leather, \$1,176,993; horses, \$470,412; cattle, \$699,564; sheep, \$1,487,730; preserved meats, \$1,069,112; frozen meats, \$942,965; raw sugar, \$684,501; ingot tin, \$1,242,679; wool, \$46,856,865.

The result of the trade between Canada and New South Wales under the new conditions will be awaited with a great deal of interest. For ourselves, we are free to confess that we do not expect to witness much of an expansion.

Do you want a

Boat Varnish

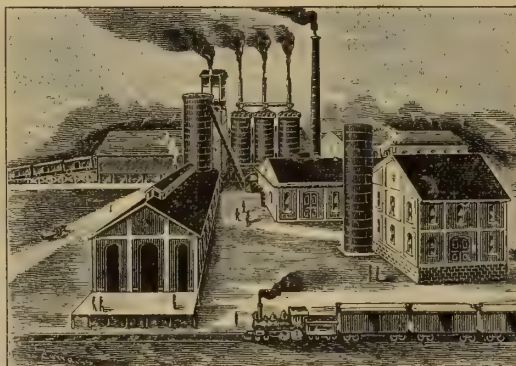
Which is Guaranteed Not to Turn White?

If so, write us and discontinue supplying even the best grades of Carriage Varnishes for this purpose, as they are utterly unsuited.

BAYLIS MANUFACTURING CO.

The oldest manufacturers
of Varnishes in Canada

16 to 30 Nazareth Street, Montreal



The Hamilton Blast Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

HIGH GRADE PIG IRON.

Church's Potato Bug Finish

Price F.O.B. Paris

Four Barrels in first order, \$10.00; sorting-up orders at \$2.50 per barrel. Less than four barrels in first order, \$2.75 per barrel. Terms 30 days net.

CALCINED PLASTER. You can save money by getting our prices and freight rates.

PARISTONE WALL PLASTER and Land Plaster always on hand. Prompt attention to small orders as well as large.

The Alabastine Company

Limited

PARIS, ONT.

The Brush Of Your Life

If your life depended upon your getting a better flat brush for painters than Boeckh's Patent Bridled Brush, you couldn't do it.


Sometime you may be able to buy a Flat Brush so bridled that it will spread a smoother, larger, cleaner surface with one sweep, but not now.

This bulging in the centre that twine or wire causes, defeats the very purpose that painters buy a flat brush for.

Illustrated Catalogue
127 Pages—Free

Chas Boeckh & Sons, Mfrs.
Toronto, Ont.

Binder Twine

Pure Manila 
650 ft. to the lb.



**BLUE RIBBON
BLUE CROWN
STANDARD**

**RED CAP
RED CROWN
WHITE SISAL**

For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.




Consumers
Cordage Co.

MONTREAL . . .

PORTLAND CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices.

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL



ONE
DOLLAR
A
YEAR

★
Sample
Copy
Free

★
D. T. Mallett
Publisher
271 Broadway
New York

BOOKS FOR THE RETAILER

Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from **HARDWARE AND METAL**.

Necessary Books for a Retailer

By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

Any one of the above
mailed for . . .

10 cents

Address

The MacLean Publishing Co.
Limited

Toronto and Montreal

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A MEETING of creditors of Alfred Caron, general merchant, St. Pamphile, Que., has been called for the 9th inst., to appoint a curator.

A. P. Beaudet, hardware merchant, Quebec, has assigned.

H. Blanchett, general merchant, Valracine, Que., has assigned.

Edward Reynolds, painter, Renfrew, Ont., has compromised at 35c. on the dollar, cash.

L. A. Purdy, general merchant, Brighton, Ont., is about to call a meeting of his creditors.

Cloutier & Frere, general storekeepers, St. Jacques, Que., have assigned to Kent & Turcotte.

F. B. Latour, general merchant, St. Polycarpe, Que., is offering to compromise at 50c. on the dollar.

J. T. Garipey, carriage maker, Montreal, has assigned to Chas Desmarteau. A meeting of the creditors was called for the 8th inst.

McLean & Oakley, manufacturers of bicycles, Toronto, have assigned to Langley & Hallworth. A meeting of creditors was held on the 6th inst.

H. C. Martin, dealer in hardware and stoves, Kingston, has assigned to George Nicholson, Toronto. A meeting of creditors was called for the 9th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

Latour, Goulet & Co., contractors, Montreal, have dissolved partnership.

Beauchamp & Lamarche, contractors, Montreal, have dissolved partnership.

J. B. Hawkes, general storekeeper, Balgonie, N.W.T., has admitted one Westbrook into partnership.

Joseph St. Pierre and Flavien Lambert have formed a partnership in Montreal to do a coal business under the style St. Pierre & Lambert.

Hugh & Peter Chisholm have formed a partnership to carry on a general business in Antigonish, N.S., under the style of Chisholm Bros.

SALES MADE AND PENDING.

Bradshaw & Clough, general merchants, Slocan City, B.C., have sold out.

The stock of the Pleace Hardware Co., Nanaimo, B.C., is advertised for sale.

The assets of Louis Favreau, machinist, Montreal, are to be sold on the 15th inst.

W. G. Ross, blacksmith, Shubenacadie, N.S., is advertising his business for sale.

J. A. Eakins, general merchant, Sparta, Ont., is advertising his business for sale.

The assets of M. Davy & Son, general merchants, Murvale, Ont., have been sold.

The stock of Richardson & Loree, general merchants, Carman, Man., is advertised for sale on the 7th July.

The assets of J. E. Plourde, general storekeeper, Cacouna, Que., are advertised to be sold on the 9th inst.

The assets of Mathias Blaguire, general storekeeper and proprietor of a saw mill, Avignon, Que., are advertised for sale on the 14th.



SEALED TENDERS ADDRESSED TO THE undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildings," will be received at this office until Thursday, 15th July.

Specifications can be seen and forms of tender obtained, on and after Thursday, 24th June inst., at this office, where all necessary information can be had on application.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

Each tender must be accompanied by an accepted bank cheque equal to five per cent of the amount of the tender, made payable to the order of the Honourable the Minister of Public Works, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,

E. F. E. ROY,
Secretary.

Department of Public Works,
Ottawa, 23rd June, 1897.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (28)

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales
made and repaired.

Write for Catalogue.



IMPROVED
WANZER

LAMP AND OVEN

Best Light Non-Explosive
Roasts Broils
Bakes Steams

without impairing the light.

Several hours Lighting and Cooking for one cent. We want to reach the public through the trade. Liberal discounts. For prices and information write The

WANZER LAMP & MFG. CO.

HAMILTON.



WANZER.

A TWIST OF
THE WRIST
AND YOUR CHAIN'S ADJUSTED.

Wolff-American
High Art Cycles.

have the only perfect
ECCENTRIC
ADJUSTMENT.

DORKEN BROS. & CO.
MONTREAL.

CHANGES.

J. W. Brown is commencing a harness business in Arden, Ont.

Thomas Crawford, blacksmith, Simcoe, Ont., is removing to Tilsonburg.

Turxiff & Co., Alameda, N. W. T., have sold out their general business to J. W. Wilcox, of Carlyle.

Oscar Amiot is registered sole proprietor of the wood and coal business of Oscar Amiot & Frere, Montreal.

R. M. Smith, manufacturer of elevators, Glenboro', has been succeeded by the Canada Northwest Elevator Co.

Thompson & Co., general storekeepers, have given up business in Mount Pleasant, Ont., and gone to Harrow, Ont.

Alfred A. Jordan, harness maker, Windsor, N.S., has registered consent for his wife, Clara Jordan, to do business in her own name.

FIRES.

Jas. Harriman, Niagara Falls, has had his planing mill damaged by fire.

W. A. P. Rhodes, harness maker, Richibucto, N.B., has been burned out.

John Kelly, carriage maker, Hastings, Ont., has been burned out. Partially insured.

The saw mill of John Fenderson & Co., Sayabec, Que., has been destroyed by fire. Partially insured.

The premises of W. H. McCordick, tanner and wood and coal merchant, have been damaged by fire; insured.

DEATHS.

Joseph Moreau, joiner, Ancienne Lorette, Que., is dead.

NEW COMPANIES.

The St. Raymond Co., Limited, Montreal, have obtained a charter of incorporation.

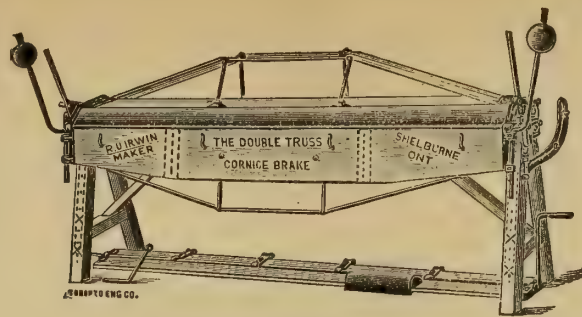
The Palmita Mining and Development Co. of London, Limited, has obtained a charter.

The Kingston Elevator and Transit Co., Limited, have applied for charter of incorporation.

The following companies in Toronto have obtained charters: The Eastern Townships Mining and Development Co. of Ontario, Limited; The Golden Crown Mining Co. of Ontario, Limited; and The Peninsular Mining and Development Co. of Ontario, Limited.

THE SHEET IRON TRADE DEPRESSED.

The depression in the common sheet iron trade of the Black Country, as the result of over-production, is becoming more than ever acute, and it is currently reported that several mills in the West Bromwich district are about to be closed down. The enormous output of sheets in South Wales is the real secret of the prevailing depression. While, however, the common sheets for galvanizing are in such a bad way, the demand for best sheets for stamping and "working up" purposes is very good, and it is a satisfactory thing that for this class of iron South Staffordshire stands well, and the makers have a large class of consumers at their doors.—Hardwareman.



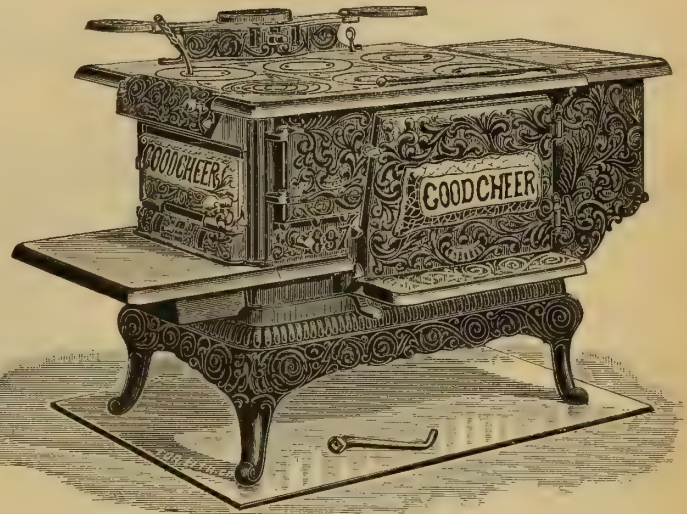
\$60 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBOURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

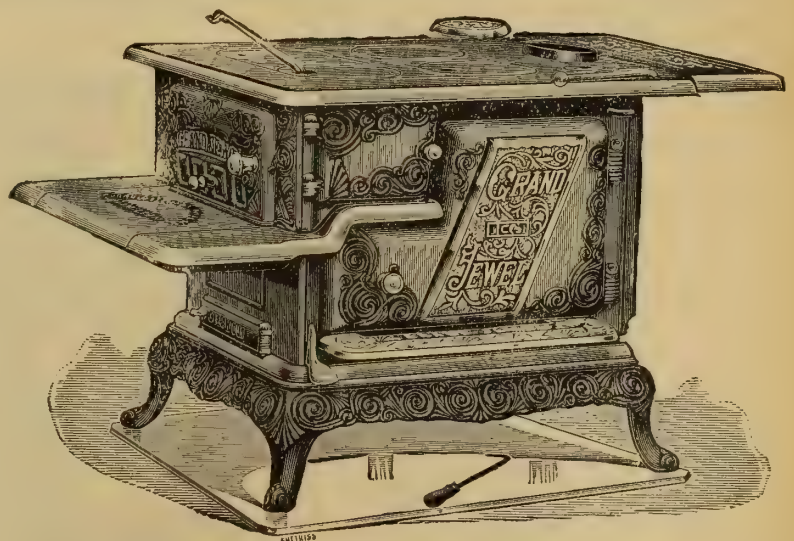
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With Patent One-piece Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son, MONTREAL

WAR BLIGHTS THE SPONGE FISHERY

In the course of an article, evidently from an authoritative source, The St. James' Gazette draws a graphic picture of the blighting effect of the recent Greek-Turkish war struggle upon the season's Mediterranean sponge fishing. It is a striking illustration of the way in which the world is bound together by modern commerce, that trouble cannot take place even in such a commercially unimportant quarter as the Levant without in some degree touching the domestic comfort of the most distant and peaceful household. Nothing could appear more remote than an Athenian mob and, let us say, an Australian nursery; but the connecting link is there. Sponges are no great matter perhaps. Still they have become a necessary of life in all civilized countries, and a scarcity of supply with a consequent rise in price would be widely, if not deeply, felt. That is likely to happen—is, indeed, already happening. The Mediterranean fishing is a seasonable business, and it has been almost entirely stopped by the war. There is scarcely any reserve stock to fall back upon, and sooner or later the loss of the season must affect the market; for though sponges are obtained from the West Indies and a few other places, they are of an inferior kind, and limited in quantity.

A LARGE SHOP.

Among the stories told of early Californian days is one which gives a remarkable picture of a blacksmith shop.

In the days before roads had been laid out and saw-mills built, a blacksmith settled on one of the river bars, and, erecting a forge of clay and stones, set the anvil on a big tree stump, which he had sawed low for that purpose, and did a thriving business sharpening the picks and drills of the miners.

He was himself a miner and did his blacksmithing almost entirely at night. Not knowing when his claim might fail or be disputed and be forced to move on to another place, he did not think it worth his while to build a regular shop.

One day two of the miners left the bar for a town some twenty miles away. As they came into the main trail leading to the blacksmith's haunt they met a man leading a horse which had lost a shoe and was stumbling badly.

"Strangers," said the man in a weary tone, "can you tell me how far it is to the blacksmith shop? My horse has lost a shoe, and he's mighty lame."

"Well, now," said one of the miners, leaning forward and smiling in a most encouraging way, "don't you be for givin' up. You're in the blacksmith's shop now, though I'm bound to tell you it's about three miles before you'll strike the anvil."—Youth's Companion.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Janned, Nickel, Silver and
Bronze Plated and Real Bronze.
Sold by all Jobbers.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of **10 cents**

HARDWARE AND METAL, Toronto

The Toronto Silver Plate Co.

... Limited

No. 660

*HOTEL
SET*



Make a
Specialty of

Silverware

Suitable for
Hotel purposes

Factories and
Salesrooms

570 King St. W.

..Toronto
Canada

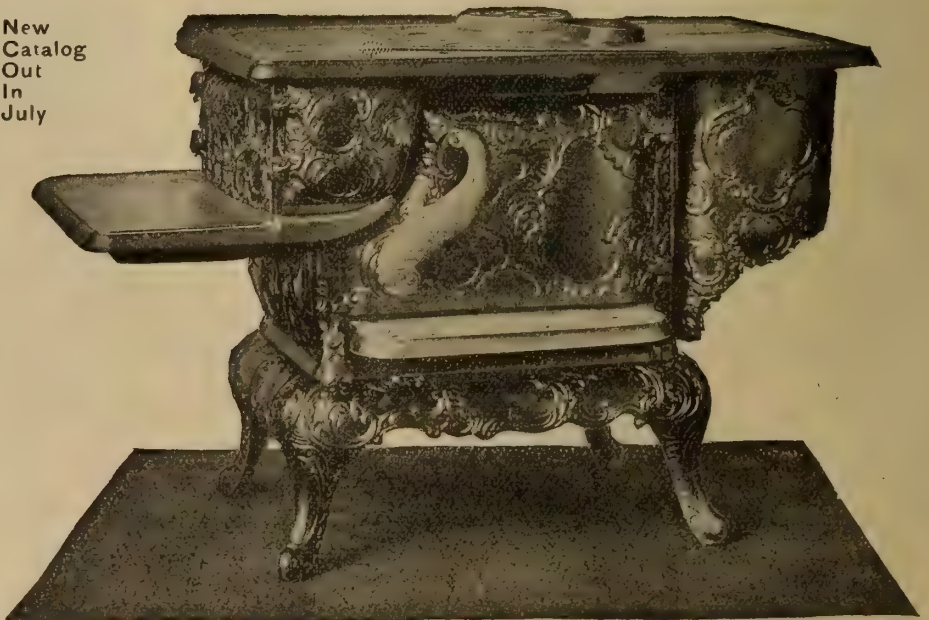
E. G. GOODERHAM,
Manager and Sec.-Treas.

THE PANSY WOOD COOK

Patent Reservoir Cook Stoves
Entirely New for 1897
Elegant in Design
Perfect in Construction
Moderate in Price

COLD ROLLED STEEL OVEN

New
Catalog
Out
In
July



The D. MOORE CO. Limited Mfrs. of High-Class
Stoves and Ranges, Hamilton, Ont.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, **payable strictly in advance.** Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

A BARNATO ANECDOTE.

In connection with the death of Mr. Barney Barnato I recall an instance of his good nature which proved of very real advantage to a gentleman well known to many of your readers. The gentleman had supplied goods to Mr. Barnato's firm, and when he had a disagreement with his employers and left them he mentioned that fact to Mr. Barnato. That gentleman asked him how much money he had saved, and was told the amount. "Buy so-and-so," he said, naming certain mining shares, "and sell them when I give you a hint to do so." The advice is said to have been taken, with the broad result that the speculator's capital was increased by several hundreds per cent. I give this as Barnato anecdotes are current just now, but at the same time I strongly advise your readers to be chary of following "tips" in a general way.—"Vulcan" in Ironmonger.

THE AGE OF IRON.

Iron vessels cross the ocean,
Iron engines give them motion;
Iron needles northward veering,
Iron tillers vessels steering.

Iron pipes our gas delivers,
Iron bridges span our rivers;
Iron pens are used for writing,
Iron ink our thoughts inditing.

Iron stoves for cooking victuals,
Iron ovens, pots and kettles;
Iron horses draw our loads,
Iron rails compose our roads.

Iron anchors hold in sands,
Iron bolts and rods and bands;
Iron houses, iron walls,
Iron cannon, iron balls.

Iron axes, knives and chains,
Iron augurs, saws and planes;
Iron globules in our blood,
Iron particles in our food.

Iron lightning-rods on spires,
Iron telegraphic wires;
Iron hammers, nails and screws,
Iron in everything we use.

WHAT IS HOME?

A prize was offered recently by London Tid-Bits for the best answer to the question, "What is Home?" Here are a few of the answers which were received:

Home is the blossom of which heaven is the fruit.

A world of strife shut out, a world of love shut in.

The golden setting in which the brightest jewel is mother.

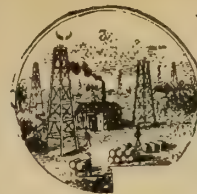
The only spot on earth where the faults and failings of humanity are hidden under a mantle of charity.

The place where the great are sometimes small and the small often great.

The father's kingdom, the children's paradise and the mother's world.

Where you are treated best and you grumble most.

A little hollow scooped out of the windy hill of the world, where we can be shielded from its cares and annoyances.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.

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Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed
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**BROOM AND CORDAGE
WORKS.**

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass
Work

Address—
Toronto Fence and
Ornamental Iron Works

Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelties, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
HESPELER, ONT.**

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags	1 00	
Best thick brown or grey felt wads, in ½ lb. bags	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge	0 60	
9 and 10 gauges	0 70	
7 and 8 gauges	0 90	
5 and 6 gauges	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge	1 15	
9 and 10 gauges	1 40	
7 and 8 gauges	1 65	
5 and 6 gauges	1 90	
Anvils.		
Per lb	0 10	0 12½
Anvil and Vice combined, each	4 50	
Wilkinson & Co.'s Anvils, .lb.	0 09	0 09½
Wilkinson & Co.'s Vices, .lb.	0 09½	0 10
Augers.		
Gilmour's, discount 65 per cent.		
Hollow Stearn's, per dozen	13 00	20 00
Adjustable Stearn's, each	5 50	6 50
Post-hole, Vaughan's, each	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		
Awls.		
Sewing, per gross	0 65	1 59
Pegging, "	0 65	1 25
Brad, "	0 85	1 60
" handled, per gross	3 60	3 30
Saddler's, per gross	0 45	1 60
Awl Hafts.		
Patent Peg, oss	7 25	8 00
" Sewing, per gross		
Awl and Tool Sets.		
Millar's Falls, per doz.	2 80	3 30
AXES.		
Splitting Axes	5 25	5 50
Chopping Axes		
Black Prince	7 25	7 50
Forest Clipper	7 25	7 50
Lance	8 50	9 00
Mann's	8 00	8 25
Maple Leaf	9 50	10 00
Hand Made	7 50	7 75
Climax	8 00	8 25
Phantom	8 25	8 50
Axle Grease.		
Per gross	6 00	13 00
Bath Tubs.		
Zinc, discount	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount.		
Boxing extra		
Bells.		
Hand.		
Brass, 60 per cent.		
Nickel, 55 per cent.		
Door.		
Gon Sargent's	5 50	8
" Peterboro', discount 50 per cent.		
Cow.		
American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		
Farm.		
American, each	1 25	3 00
House.		
American, per lb	0 35	0 40
Bellows.		
Hand, per doz.	3 35	4 75
Moulders', per doz.	7 50	10 00
Blacksmiths', discount 60 per cent.		
Belting.		
Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 10 to 70 p.c.		
Bench Stops.		
Per doz	5 00	6 00
Bits.		
Auger.		
Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p. c. discount.		
Car.		
Gilmour's, 47½ to 50 per cent.		
Expansive.		
Clark's, per cent.		
Excelsior, 10 per cent.		
Gimlet.		
Clark's, per doz	0 65	0 90
Diamond, Shell, per doz	1 00	1 50
Nail and Spike per gross	2 25	5 20

Blind Rollers.		
Annex, per doz	1 25	1 75
Mascott, "	1 35	1 85
Erminie, "	1 12	1 20
Blind and Bed Staples.		
sizes, per lb	0 7½	0 12
Bolts.		
Carriage, dis., 70 p. c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 and 5 per cent.		
Elevator, dis., 35 to 40 per cent		
Machine, dis., 70 p. c.		
Coach Screws, dis. 77½ p. c.		
Boring Machines.		
Complete, with augers, each	5 00	7 50
Braces.		
Barber's	6 00	7 75
Barber's Ratchet	10 00	11 00
Farmers'	2 00	2 75
Illar's Falls	15 50	29 00
Brackets.		
Shelf.		
Japanned Canadian, per doz.	0 50	3 40
pairs	0 85	3 20
Berlin Bronze Canadian	0 85	3 20
Broilers.		
Light, dis. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, "	6 00	
Henis, No. 9, "	7 00	
Queen City "	7 50	10 00
Butchers' Cleavers.		
From 8 to ch, per doz.	4 23	
Butts.		
Brass.		
Wrought Brass, dis., 17½ p. c. revised list.		
Cast Iron.		
Loose Pin, dis. 70 per cent.		
Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p. c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p. c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair	0 40	0 65
Can Openers.		
Acme, per gross	9 00	10 00
Sardine Scissors, per doz	3 75	4 50
Card.		
Horse, per do	0 60	1 00
Carpet Stretchers.		
American, per doz	1 00	50
Bullards, per doz	6 50	....
Carpet Sweepers.		
Bissell, per doz	22 50	
World, "	21 75	
Daisy, "	24 00	
Star "	18 00	
Crown Jewel, per doz	29 00	
Grand Rapids, "	24 00	33 00
Cartridges.		
(See Ammunition.)		
Castors.		
Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 55 to 57½ per cent.		
Cattle Leaders.		
Nos. 31 and 32, per gross	8 50	9 50
Cement.		
Canadian, Portland	2 50	
English "	2 75	
Belgium "	2 50	
Canadian hydraulic	1 10	
Figures are for carload lots.		
Chalk.		
Carpenters' Colored, per gross	0 45	0 75
White lump, per cwt	0 60	0 65
Red	0 05	0 06
Crayon, per gross	0 14	0 18
Chisels.		
Socket, Framing and Firmer.		
American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz	0 85	4 00
Churns.		
Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		
Steel, net	3 00	
Clamps.		
Judds, dis. 20 per cent.		
Stearns, per doz	3 00	10 00
Clips.		
Axle dis. 65 per cent.		
Coffee Mills.		
Bo	3 60	13 00
Side	3 60	4 00
Enterprise, No. 0	1 35	
" No. 2	70	
Compasses, Dividers, Etc.		
American, dis. 62½ to 65 percent		

Cradles, Grain.		
Canadian dis. 25 per cent.		
Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		
Door Springs.		
Torrey's Rod, per doz. (15 p. c.)	2 00	
Coil, per doz	0 88	1 60
English per doz	2 00	4 00
Draw Knives.		
American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		
Drills.		
Hand and Breast.		
Millar Falls, per doz	16 00	51 50
P. S. & W., dis. 40 per cent.		
DRILL BIT.		
Morse, dis. 37½ to 40 per cent.		
Standard, dis. 47½ to 50 per cent.		
ELBOWS.		
Stovepipe.		
Per doz	75	1 70
FAWCETS.		
Cork Lined, per doz	0 30	0 35
Wine, per doz	1 30	3 25
Star, "	2 80	3 90
Fenn's Corkstops, No. 2, per dozen	1 70	
Petroleum, per doz	4 50	6 50
FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 50 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 per cent. to 53 10, 5.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		
FLUTING MACHINES.		
Each	0 60	2 00
FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.		
FREEZERS		
Ice Cream.		
Gem, from \$1.25 to \$7 net.		
FRUIT PRESSES.		
Henis, per doz	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		
FRY PANS.		
Acme, dis. 62½ to 65 per cent.		
GAUGES.		
Marking, Mortise, Etc.		
Stanley's, dis. 50 to 55 per cent.		
Wire Gauges.		
Winn's, Nos. 28 to 33, each	1 65	2 40
GLASS.		
Window.		
Box Price.		
Double Diamond.		
Size	Per	Per
United	50 ft.	100 ft.
Inches.		
Under 26	1 20	2 30
26 to 40	1 35	2 60
41 to 50	3 00	2 20
51 to 60	3 30	3 85
61 to 70	3 60	4 35
71 to 80	4 50	5 60
81 to 85	4 50	6 35
GLUE POTS.		
Tinned, each	0 30	
Enamelled each	0 55	
GRINDSTONE FIXTURES.		
P. S. & W., per doz	3 30	4 00

HAMMERS.		
Nail		
Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.	
Tack.		
Magnetic, per doz.....	1 10	1 20
Sledge.		
Canadian, per lb	0 07½	0 08½
Ball Pean.		
English and Can., per lb.....	0 22	0 25
HANDLES.		
Axe, per doz., net,	50	2 00
Store door, per doz	1 00	1
Chest, per doz. pairs.....	0 40	2 50
Chisel.		
Firmer, per gross	3 00	4 50
Socket Firmer, per gross	3 25	8 00
Socket Framing, per gross.....	3 75	5 00
Fork.		
C. & B., dis. 50 per cent. rev. list.		
Hoe.		
C. & B., dis. 50 per cent. rev. list.		
Saw.		
American, per doz.....	1 00	1 25
Plane.		
American, per gross.....	3 15	3 75
Hammer and Hatchet.		
Canadian, 35 per cent.		
Cross-Cut Saw.		
Canadian, per pair	0 15	0 0
HANGERS.		
Door, 4 and 5 inch, per pair. .	0 40	
Lanes, 50 to 50 and 5 per cent.		
HATCHETS.		
Canadian, dis. 40 to 42½ per cent		
HINGES.		
Blind, Parker's, dis. 60 and 10 to 65 per cent		
" Shepard's Noiseless, dis. 60 per cent.		
" Buffalo, dis. 60 to 70 p. c.		
Light T and strap, 70 p. c.		
Heavy, per lb	0 03½	0 04½
Screw hook and hinge—		
6 to 12 in., per 100 lbs.	3 15	
14 in. up, per 100 lbs.	2 35	
	Per doz. set.	
Screw Eureka.....	1 13	1 80
Gate, Clark's	1 50	2 20
" Shepard's, dis. 50 to 60 per cent.		
	Per doz. pair.	
Spring.....	1 00	3 50
" Shepard's Samson.....	1 20	
HOES.		
Garden, Mortar, etc. dis. 60 and 10 p. c.	1896 list	
Planter, per doz	4 00	4 50
HOOKS.		
Cast Iron.		
Bird Cage, per doz	0 50	1 10
Clothes Line, per doz	0 27	0 63
Harness, per doz	0 72	0 88
Hat and Coat, per gross	1 00	3 00
Chandelier, per doz	0 50	1
Wrought Iron.		
Wrought Hooks and Staples, Can., dis. 47½ per cent.		
Wire.		
Hat and coat, dis. 60 to 60 and 10 p. c.		
Belt, per 1,000	0 60	2 70
crew, bright, Eng., dis. 60 per cent.		
HORSE NAILS.		
Canadian, dis. 50 p. c.		
Canada Horse Nail Co.'s "C" brand f.o.b. Montreal,	50 p. c.	
HORSE SHOES.		
F.o.b. Toronto and Hamilton	3 35	
Steel, "	4 85	5
F.o.b. Montreal 10c. less, and London more than above.		
Sava, "	6 00	9 00
Shutter, porcelain, F. & L. screw, per gross	8 75	10 00
ICE PICKS.		
Star per doz	3 00	3 25
KETTLES.		
Brass spun, 7½ p. c. dis. off new list.		
Copper, per lb	0 30	35
American, 60 and 10 to 65 and 5 p. c.		
KEYS.		
Lock, Can., dis. 50 p. c.		
abinet, trunk, and padlock, Am. per gross.....	1 60	
KNOBS.		
Door, japanned and N.P., pe doz.	0 85	3 00
Bronze, Berlin, per doz.....	2 75	3 25
Bronze Gem, "	6 00	9 00
" "	8 75	10 00
Shutter, porcelain, F. & L. screw, per gross	1 80	4 00

KNIVES.
Clausen, bread, cake, and paring knives, \$7.00
doz. sets net. to 10 per cent.
Christie, \$7.00 net.
Hay knives, spear point, L or T handle, 60
to 60 and 10 per cent.
Lightning, per doz. 6 50 8 40
Heath's, 52½ p.c.

LADLES.
Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.
Porcelain lined, per doz. 2 20 5 60
Galvanized, " 1 87 3 85
King, wood, " 2 75 2 90
" glass, " 4 00 4 50
A glass, " 1 20 1 30

LINES.
Fish, per gross. 1 05 2 50
Chalk, " 1 90 7 40

LOCKS.
Canadian, dis. 50 p.c.
Russell & Erwin, per doz. 1 75 7 50
Cabinet,
Eagle, dis. 27½ to p.c.

PADLOCKS.
English and Am., per doz. 0 50 6 00
Scandinavian, " 1 00 2 40
Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.
Iron and Brass.
Flat head, discount 25 p.c.
Round head, discount 21 p.c.

MAGNOLIA METAL, ETC.
Magnolia Anti-Friction Metal, per lb. 25
No Name Metal, " 18
Mystic Metal, " 18
F. O. B. New York or Chicago.

MALLETS.
Tinsmiths', per doz. 1 25 1 50
Carpenters', hickory, per doz. 1 25 3 75
Lignum Vitae, per doz. 3 85 5 00
Caulking, each 1 60 2 00

MATTOCKS.
Canadian, per doz. 8 50 10 00
American, 60 and 10 p.c. off list.

MEAT CUTTERS.
Enterprise, American, dis. 30 to 32½ p.c.
German, 15 per cent.

MINING KNIVES.
American, per doz. 0 42 2 35

MOLASSES GATES.
Stebbin's Patent, dis. per cent., 77½ per cent

NAILES.
Cut Nails (Iron). Basis—50 to 60 dy. \$1.95
f.o.b., Toronto, Montreal, Hamilton,
London.
Cut Nails (Steel). Add 10c. to the prices in
list for iron nails. 10-keg lots freight pre-
paid to maximum of 25c. per 100 lbs.

Wire Nails, bas. \$1.33 Pittsburgh, or \$2.04
delivered Toronto, Hamilton, London,
and to places where freight from Pitts-
burg is less than car load lots does not
exceed 21c.; other places where rate is
higher, excess is added. Terms, 4 months
or 3 off and 30 days; delivered in lots of
10 kegs or more.

Brads and moulding nails, 80 p.c. from new
list.

NAIL PULLERS.
German and American. 1 85 50

NAIL SETS.
Square, round, and octagon,
per gross 3 38 4 00
Diamond 12 00 15 00

NETTING.
Poultry, 67½ per cent.

OIL.
Canada refined oil (Toronto) 0 16 0 16½
Carbon safety " 0 18 0 00
Canada w. w. " 0 18 0 00
American w. w. " 0 00 0 21
Pratt's Astial. 0 00 0 22

OILERS.
McClary's galvan. iron oil can,
with pump, per doz. 0 00 19 50
Zinc and tin, dis. 50, 50 and 10.
Copper, per doz. 1 25 3 50
Brass, " 1 50 3 50
Malleable, dis. 25 per cent.

PAIS.
Galvanized, per doz. 2 25 3 30

PENCILS.
Dixon's, per gross. 1 00 4 25
Carpenter. 2 25 3 60

PICKS.
Per doz. 6 00 9 00

PICTURE NAILES.
Porcelain head, per gross. 1 65 3 00
Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY
Forbes Patent Die Stocks.—Curtis & Curtis,
Mfrs., Bridgeport, Conn.
No. 30 Hand Machine, range ¼ to
2 in. R. & L. \$50 00
No. 38 Hand Machine, range 1½
to 4 " 100 00
No. 56 Hand Machine, range 2½
to 6 " 175 00

PLANES.
Wood, bench, Canadian dis. 55 per cent.,
American dis. 55.

Wood, fancy Canadian or American, 37½
to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.
English, per doz. 2 00 5

PLIERS AND NIPPERS.
Button's Genuine, per doz. pairs, dis. 37½
40 p.c.
Button's Imitation, per doz. 5 00 9 00
German, per doz. 0 60 2 60

PLUMBS AND LEVELS.
R. & L. Co., dis. 70 and 5 p.c.

POPPERS.
Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.
Per doz. 4 00 5 50

PULLEYS.
Hothouse, per doz. 0 55 1 00
Axle " 0 22 0 33
Screw " 0 27 1 00
Awning, " 0 35 2 50

PUMPS.
Rumsey or Canadian cistern, 60 p.c.
Pitcher spout, 70 to 70 and 5 p.c.
Canadian cistern, 60 p.c.
Canadian pitcher spout, 70 to 70 and 5 p.c.

PUNCHES.
Saddlers', per doz. 1 00 1 85
Conductors' " 9 00 15 00
Tinner's solid, per set. 0 00 0 72
" hollow, per inch. 0 00 1 00

PUTTY.
Bladder, per lb. 1 75 0 17½
Tins, lbs. 2 50 2 75

RAIL.
Barn door, per foot. 0 02½ 0 02½
Sliding door, " 0 03½ 0 03½
Lanes, " 0 02½ 0 02½

RAKES.
Cast steel and malleable Canadian, list dis.
60 to 60 and 10 p.c. revised list.
Wood, 25 per cent.

RAZORS.
Geo. Butler & Co.'s, per doz. 8 00 18 00
Boker's, " 7 50 11 00
Wade & Butcher's, " 3 60 10 00
Arbenz's, " 9 00 18 00
Theile & Quack's " 7 00 12 00

RAZOR STROPS.
Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.
4 mos. or 3 per cent. cash 30 days
(St. el.) 65 p.c.
Carriage. Section, Wagon Box Rivets, etc.,
(Norway I on), 6 p.c.
Black M. R. v. t. (Steel), up to 2½ lbs. inclu-
sive, 6 and 5 p.c.
Black M. Rivets (Steel), 3 lbs. and heavier,
65 p.c.
Black M. Rivets (Norway I on) 60 p.c.
Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.
" ½ lb. boxes and
cartoons, 1c. per lb. extra, net.
Burrs, iron or steel, 55 and 5 per cent.
Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.
Canadian, dis. 35 to 37½ per cent.

ROPE.
7-16 in. and larger, per lb. 5½ 00 7½
¾ in. " 5½ 00 7½
¼ and 5-16 in. " 6½ 00 8½
Cotton " 15 17
Russia Deep Sea " 00 13
Jute " 6½ 7½

RULES.
Boxwood, dis. 80 and 5 to 10 p.c.
Ivory, dis. 37½ to 40 p.c.

SAD IRONS.
Mrs. Potts, per set. 0 60 1 00
" N.P., per set. " 90

SAD HEATERS.
Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.
B. & A. sand, 40 and 5 to 45 per cent.
Emery, per quire " 0 55 0 90

SASH CORD.
Per lb. 0 22 50

SASH LOCKS.
Triumph and Morris, dis. 37½, 40 per cent.
Kempshall's, dis. 40, 62½ per cent.
Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.
Sectional, per 100 lbs. 1 40 1 50
Solid, " 1 25

SAWS.
Crosscut, McMillan & Haynes,
per dozen 0 40 0 70
"Empire," McMillan & Haynes,
per ft. 0 00 0 70
Hand, Disston's, dis. 12½ to 15 p.c.
S. & D., 40 to 40 and 10 per cent.
Crosscut, Disston's, per ft. 0 35 0 55
S. & D., dis. 35 p.c. on Nos. 2 and 3.
Hack, complete, each. 0 75 2 75
frame only. 0 00 0 75

SAW SETS.
"Lincoln," McMillan &
Haynes, per doz. 0 00 7 50
Whiting " 6 87 7 00

SCALES.
Gurney Scales, 50 p.c.
B. S. & M. Scales, 50 p.c.
Champion 60 per cent

SCRAPERS.
Box, per doz. 2 10 4 50
oot, " 0 40 3

SCREENS.
Window, patent, per doz. 2 20 4 50
Door, per doz. 7 10

SCREW DRIVERS.
Sargent's per doz. 0 65 4 00

SCREWS.
Wood, F. H., iron, and steel, dis. 87½ &
10 p.c.
Wood, F. H., " dis. 80 and 10 p.c.
" F. H., brass, dis. 82½ and 10 p.c.
" R. H., " dis. 75 and 10 p.c.
Diamond point wood screw nails, bright, dis.
77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00
" iron, " 4 25 5 75

SCYTHES.
Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.
Canadian, dis. 40 to 45 p.c.

SCYTHES.
Discount, 60 and 10 p.c. revised list.

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Canadian, dis. 40 to 45 p.c.

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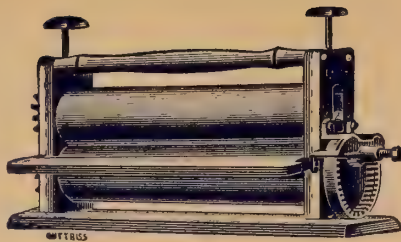
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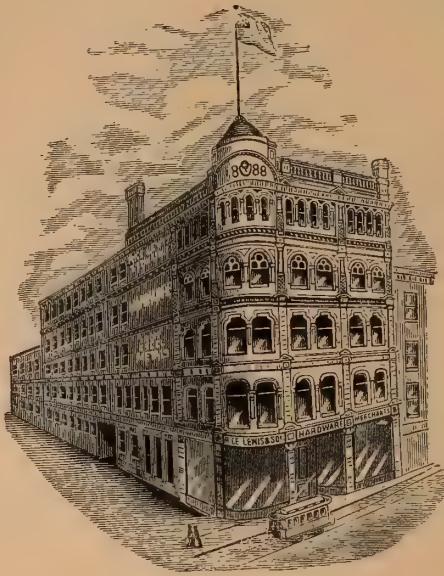
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ADVANTAGE OF AN EXPORT TRADE.

THE most valuable trade for any nation to cultivate is its home trade. Just as it is the tendency of water to run down hill, so it is the tendency of trade to follow along the line of least resistance.

In the home trade there are no adverse Customs tariffs to obstruct the way and distances are as a rule less, although it is true railway discriminations often minimize the latter advantage.

But while the home market is doubtless the best market, it is by no means the only one which a nation should cultivate in order to the establishment of its commercial permanency. There is the export trade to be looked after.

Commerce is the foundation of national greatness. A nation may conquer its enemies and acquire their territory. But unless the arts of commerce as well as the arts of war are cultivated that nation must before a great while decay.

The merchant who has a dozen customers for a certain article is naturally, all things else being equal, in a better position than he who has only one. If the buying capacity of the latter's customer decreases or ceases altogether it is obvious that his diffi-

culties are greater than would be those of the former if the buying power of one of his customers decreased or ceased altogether.

The same law applies to nations as to individuals: The more numerous and diversified a nation's customers the less likely will it feel the burden of hard times which roll over the commercial world in cycles.

Great Britain stands out as an unmistakable proof of that. Britain's commercial field is the world. Every nation on the globe, uncivilized and civilized, buys more or less goods from her. She thus has all ways customers in some part or other of the world where trade is at least in a normally healthy condition.

Take, for instance, the past couple of years. Everyone knows that while on this side of the Atlantic there has been the minimum of inactivity, in Great Britain there has been the maximum of activity.

No country can live, move and have its being within itself. It must have intercourse with other nations. It must buy from and sell to other nations.

The United States, by hostile legislation, has declared it does not believe in this doctrine. But while with one movement it has closed its front door to all nations and kindreds, with the next it has stated its willingness, under reciprocal conditions, to open its back door to at least the majority of these nations and kindreds. As one of the leading trade journals in the United States put it a short time ago: "Reciprocal trade with foreign nations has become a necessity to American prosperity. We must export to prosper."

The chief business of a country is to

cultivate business. And that means in the foreign as well as in the home market.

Canada, while solicitous for the home trade, and rightly so, has not been as solicitous for that with foreign countries as she might or should have been. And while this has been chiefly due to the paucity of practical business men in Parliament and in the Federal Cabinets of the country, yet the business men themselves are not without blame.

For many years Canadians thought that the Promised Land for their exports' was the United States. And when the McKinley tariff was levied against us in 1890 a good many imagined that back into the wilderness we would have to wander with some of our chief products.

But the blow that practically drove many of our products out of the United States directed our footsteps towards the British market.

It is curious to note that the greatest development in our aggregate export trade began with Uncle Sam's rebuff. Compared with 1890 it is 25 per cent. larger, and that increase is more than due to the growth of our trade with Great Britain.

But although our export trade has developed so satisfactorily during the past few years, to say that it has assumed satisfactory proportions would be far from the truth. Taking into consideration the natural resources and possibilities of the country, they are by no means what they should be.

Our exports per head of population are less than twenty-four dollars, which is a great deal below the average of any of the other self-governing British colonies.

It is obvious, therefore, that, while doing

our best to cultivate the home market, we should inaugurate a more vigorous export policy than we have at present. The Government can do a great deal in the premises, but business men themselves must also be active.

Just as there are a variety of peculiarities among customers in the home market, so is there among the importing foreign countries. What these peculiarities are it is the duty of exporters in Canada to study. Until they have learned what these are they will necessarily be handicapped in their efforts to expand their trade with foreign countries.

It is not necessary for a business man to shut his eyes in order to be asleep.

A UNIQUE DEPARTURE.

FOR unique or striking departures departmental stores on the American continent do not enjoy a monopoly. Their confreres in Great Britain are seemingly well up to them.

For instance, one of the largest of the department stores in London has an insurance department.

There is life insurance, children's insurance, partnership insurance, contingent policies, payable in case one life die before another, and many other kinds of insurance. But the most unique plan of the many systems of insurance which this particular departmental store has in force is that known as No 10, which is to "issue assurances to cover the risk of issue being born and so defeating the inheritance of property." For example, A has property which, when he dies, will go to B, provided he (A) has no issue. The object of plan No. 10 is to provide against such an eventuality.

If this is not a unique departure for even a departmental store **HARDWARE AND METAL** would like to know what it is.

One of the chief peculiarities of the department store is that it is ever devising new schemes to promote business, and herein does it impart a lesson to merchants of all classes and conditions.

In these days of keen competition it is essential, in order to succeed, that merchants should be ever devising new ways and means of catching trade. Business does not come in these days. It must be sought. And the merchant who does not industriously seek it will not find it.

DEMAND FOR GERMAN SKATES.

LAST season the importations of German skates into Canada were enormously increased, and this season, if the demand already experienced from jobbers is any criterion, they will be even greater.

The volume of orders so far placed for fall delivery with leading commission men is greater than it was at the same time last summer, and promises to keep up.

The demand seems to be running to the acme spring skate of the well-known Halifax pattern, but enquiry for the different styles of skeleton club skates is by no means lacking. It is in this connection that evidence is afforded of how closely the German manufacturers watch the market. Any new styles that came out last season are closely copied and some of the more popular designs which have been patented in Canada are so closely copied that it would require an expert to tell the two apart. The cute Germans, however, have evaded the letter, if not the spirit, of the law by some minor divergence that would protect their goods in the event of any legal complications.

They certainly are prompt to absorb any new ideas, and if their exports to this market continue to increase as they have, it seems to be only a question of time when they will have the Canadian skate trade to themselves.

Such methods as putting on brass plates, etc., to give their skates the appearance of English made goods so as to catch the Manitoba and Northwest demand may not be admirable ethically, being a kind of cheap dodge, but it shows that they are keenly alive to the important fact of catering to the tastes of their customers. Other makers are not.

ABOUT DEPARTMENT STORE COMPETITION.

Not so much is heard of this subject just now. The daily press usually tire of a business discussion after a short time. Yet this is a season when town and country trade feel city competition. People go on excursions to the larger cities and return laden down with purchases. It is not fair to the locality, and, as we have suggested before, the local papers should be invited to point out to the people the folly of buying away

from home. How is a town to prosper if the cream of the trade is given to a big city and the local merchant is left with the skimmed milk?

But department store competition is making one thing clear. To compete with them, we must buy and sell for cash. The merchant by taking his cash discounts will be able to sell at a profit and still meet city prices. This is the big lever used by the departmentals. They get the ready money of their customers and are able to lay it out to the best advantage. It is, of course, not so easy to inaugurate a cash system in a small centre, where people know you and expect credit, as in a large centre. But tact and courtesy will overcome the difficulties, and once you have got rid of books and book debts you will wonder how you ever got on in the old style. That at least is the testimony of most of our merchant readers.

ELECTRIC ROADS AND LOCAL TRADE.

A number of thriving towns in Canada are now going in for electric street railways. This brightens up the town, and has, on the whole, a good influence on trade. The town traffic on these electric lines is perhaps not very extensive, so that merchants should favor the extension of the lines into the county along the main roads of travel so as to induce constant visits from country customers. During seeding or harvesting a farmer will often refuse to take his horses out after the day's work, and wives and daughters do not visit town as often as they would like. An electric service along well-traveled roads will bring many into town. Even if it only extends three miles or so in certain directions people will walk a certain distance to and from the end of the line. It seems to me, therefore, that merchants should, according to the town and its situation, endeavor to promote these extensions and use them to increase town trade.

OSHAWA MALLEABLE IRON WORKS.

It will be remembered that in December of '94, a disastrous fire visited the works of the Ontario Malleable Iron Company, Oshawa. Since that time the works have been running at much less than former capacity, but it has now been decided to rebuild extensively. One building will be 200 feet long by 30 feet deep; there will be

another wing erected 200 feet long by 150 feet wide. The front part of the former building will be two storeys; the rear will be used as a general foundry and annealing shop. It will be under one roof and supported by pillars, and will be fire-proof. It is to be hoped the Ontario Malleable Iron Company will be well repaid for its enterprise. It might be mentioned that a great deal of the material for the new buildings is already on the spot.

UNGRAINED CELLULOID.

The ever increasing demand for American celluloid for table cutlery has frequently been the subject of comment in our columns. To meet the call for a somewhat cheaper article there has just been imported into Sheffield a quantity of material ungrained, but otherwise identical in quality with that which has held the trade for some time past. This will be placed on the market at about a ten per cent. lower price than the grained material; and as it has, it is claimed, all the good wearing qualities of the other, and in appearance is not far inferior, it should command a ready sale.—Hardwareman.

TORONTO BOARD OF TRADE.

A SPECIAL meeting of the Toronto Board of Trade was held on the afternoon of July 12. In compliance with the constitution, President Gurney in opening the meeting read a report referring to various matters which had been before the Council since the preceding general meeting.

In this report Mr. Gurney dealt with the actions the Council had taken to have the Canadian Commissioner to Mexico appointed. It has always been the policy of the Council to extend Canadian markets, and so when the possibility of the opening up of trade on the Pacific Coast with Mexico and Central America was impressed on the members by Capt. Yates, a delegate from the British Columbia Board of Trade, it was decided to send Capt. Yates on to Ottawa to advise the Government in the matter. The Government acted on the suggestion, and Mr. E. E. Sheppard is now in Mexico investigating the question.

Mr. Gurney pointed out how, in changing the screen used in determining the value to be attached to coal screenings, the Government had placed an onerous tax on ordinary coal, and how a readjustment of the rules was secured at the suggestion of the repre-

sentative of the Council who was sent to Ottawa.

In regard to the finances of the board, Mr. Gurney pointed out that Council had arranged with the New York Life Insurance Co. for a still further reduction in the rate of interest—the whole reduction meaning a saving of about \$6,000 a year. In consideration of this, the second and third debenture holders have consented to a suspension of interest during a period of ten years. This, it is calculated, will enable the board to pay off its floating indebtedness in three years, notwithstanding the reduction of fees which it is proposed to make.

After Mr. Gurney had read his report, a notice of motion was made by Mr. A. E. Kemp, to the effect that resident members' fees should be \$12 and outside members' fees \$10 per annum. Originally the fees were \$10 a year, but they had been raised to \$15 and finally \$17. It was considered by those present on Monday that the present membership could not be sustained at the fee of \$17, but that, if the proposed reduction were made, additional members could be added to put the finances on a sound basis.

Although the members were unanimous as to the advisability of the reduction, it was impossible to vote on it, as the constitution states that there must be two meetings before they could pass on the matter.



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PRINCIPLES IN FINANCE—BARTER.Henry Douglas Parmelee in *Business*.

THAT there has been a gradually increasing desire on the part of many to obtain a general idea of the science of economics has been recently in great evidence. It was pointed out, some months ago, that the campaign of 1896 had given rise to this desire on the part of all men who wished to be well informed upon subjects of vital importance to the nation. The currency literature of that campaign went far beyond monetary science, and encroached upon the subjects of labor, capital, immigration and many allied subjects.

Intelligent inquiries in regard to these subjects, and those related to them, have been constantly received by the newspapers and financial journals throughout the country. These alone furnish one of the best evidences of the growing popularity of economics.

There is much which is contained in the science of economics which is well known to practical business men, and which arises in their every-day transactions. They may not know the multitudinous relations which these subjects have, but for all practical purposes they are often contented and satisfied with their knowledge. The broad-minded business man is not content with a circumscribed knowledge of economics, and he will always be ready to learn anything which will help him in his daily business. The following advice, which was given not long ago by one of the retired merchants of New York City, is an encouraging evidence of the love of knowledge fostered by a business life and a realization of the value of all study.

A young man in his sophomore year in one of our large universities had occasion to visit the above-mentioned retired merchant and found him reading in his library. During a conversation, which was mainly in regard to the young man's studies at the university, the gentleman asked: "Do you study economics?" and upon being told that that was a subject which did not come until the junior year, the gentleman said:

"When I first entered business, many years ago, as a clerk in one of the large shipping houses in New York City, my education was exceedingly limited. I was under continual embarrassment in regard to many things which are ordinarily known to-day by boys much younger than I was at that time. My mortification was occasionally aroused when I was faced with some practical question in regard to international commerce and problems relating to it.

"From that day to this I had an extreme desire to become acquainted with all literature upon the subject of economics. Naturally, during the years of my business life it was

not possible for me to study what I wanted of that very important science, but now that I have retired from business, and have given myself up to a quiet life, like Cato, in my old age, I am taking up the studies of youth. You see, I have volumes of Ricardo and Mill on my desk, and I am keeping in touch with recent economic literature contained in the English and American journals.

"My advice to you is, by all means make a careful and searching study of economics, for nothing will be more valuable to you in your life work, or more satisfying in its results than an adequate knowledge of this great subject."

I have given the substance of the conversation, for the reason that I believe it is an indication of just what men who have been through the practical experiences of life advise to all who are preparing themselves for those experiences. It is true that there is a great deal which cannot be learned from textbooks or from study. Most of our knowledge must be gained by a worldly experience. It cannot be bought or handed down to us. At the same time, it is possible to minimize the mistakes and embarrassments which are sure to come up in a business life, if we thoroughly master certain of the fundamental principles and theories of that life.

Occasionally men are found who, ignorant themselves, ridicule or decry a study of economics, saying that it is not a practical subject, but theoretical, and for that reason useless. This is rather wholesale condemnation of a science which is founded upon past experiences, and from which general conclusions are drawn, which serve to guide men in their transactions and at the same time offer a mental exercise for those who are enough interested to exert their minds in solving intricate problems.

I shall attempt to give, in a series of articles upon finance, a brief and concise presentation of certain subjects which are included under that department of economics. No originality will be claimed for the articles in question, as they will deal with subjects so fundamental in their character that there will be no necessity of theorizing or making original comments. The articles will cover the subjects of barter, money, capital, credit, interest, exchange and price.

Many of these subjects are so well known to the readers of *Business* that they may easily be passed over, but it is my hope that the presentation which will be given will serve not only to raise new interest in the subject, but to recall to those already familiar with it certain principles which they are always glad to review.

It is well known that the best method of

study is that of repetition, and if these articles serve to fix more firmly in mind elementary subjects, the author will consider that he has accomplished his purpose.

The first subject to which I shall call attention is that of barter. Before money, or the medium of exchange, as it is called, was used, men's wants had to be satisfied by barter. This was a system of exchange, and its relation to the trade of the world to-day is analogous to the relation of the barter of childhood to the business of middle age.

The familiar sight of two boys bartering, or to use their own expression, "swapping," articles at school is well known. The analogy, however, serves its purpose here, for it was in the early stages of man's existence that barter was resorted to. The desire for variety created the demand for articles produced by others. It was not long before the inconveniences which arose in barter did away with its practice, or, more correctly, brought into existence a medium of exchange.

If A is a maker of hats, and B a maker of shoes, and A is desirous of a pair of shoes and goes to B, who desires a hat, for an exchange, he may find that the value of one hat is only equal to the value of half a pair of shoes; yet B does not care for two hats. Here the question arises immediately: How shall an equitable division be made? The exact equivalency between the two articles cannot be made, but if, by a mutual agreement, A and B decide that they will exchange their articles of manufacture for some one commodity which they both need and are using, such as wheat, for example, the difficulty disappears, and a vast amount of labor which would be incurred in the intricacies of barter is done away with. It was in this way that the medium of exchange became necessary, and such a medium has been termed "money."

The transactions, one of which has been described, have become fewer as civilization has advanced, yet all trade and commerce finds as its basis the relative values of commodities to each other, as determined by barter.

When barter was confined to individuals in a small community, it is likely that the article which was most generally used there was taken as the medium by which things were gauged. This is a statement which has some historical interest. For example, among certain ancient tribes in biblical times, sheep were used as a medium of exchange. Our word pecuniary comes from the Latin word pecus, meaning flock. In the agricultural stage, where cereals were mainly produced, grain was used as a medium of exchange. A local measure of value was sufficient, but as the commerce

of the world began to increase, and trade went beyond the confines of the small community and sought other tribes and other countries, a more complicated system was the result. It was then that a more generally accepted standard of value was agreed upon.

CATALOGUES, BOOKLETS, ETC.

CATALOGUE No. 9 has just been sent out from the Clayton Air Compressor Works, New York. It is claimed by this firm to be the most complete work of the kind ever attempted. It contains, in addition to an illustrated description of the features of the Clayton type of compressor, illustrations and lists of sizes of the standard patterns of compressors, and a descriptive article upon the widening use of compressed air, showing all the various applications of this power up to date, together with cuts and descriptions of tools and appliances. It also illustrates and explains the Clayton air lift pumping system, which is achieving remarkable results as the best known method of raising water from wells.

If it were not for the general instruction on the modern utility of air-compressors, the work would not be nearly so interesting as it is. Although issued by a firm that manufactures machinery, it can scarcely be termed a catalogue and price-list, but rather 130 pages descriptive of this line of modern mechanism. This machinery has been worked on for only 25 years, and as yet machinists in general are not acquainted with its peculiar uses. Accordingly it is a natural desire of these manufacturing firms to send out instructive literature, and it must be said that the Clayton Air-Compressors have gone about it in no mean style.

Among the other contents of this catalogue will be found valuable data for figuring the loss of pressure due to friction in transmitting compressed air through pipe, and the capacity lost by air compressors in operating at various altitudes above the sea level.

The catalogue is issued for gratuitous distribution, and will be forwarded upon application to 36 Cortlandt street, New York.

M. & L. Samuel, Benjamin & Co., Front street west, Toronto, have just issued their annual catalogue of sporting goods, consisting chiefly of rifles, shot guns, revolvers and ammunition. It is a pamphlet of 24 pages, fully illustrated, and a tasty yet business-like advertisement. One will be provided on application to the firm.

For the convenience of the trade The Iron Age has compiled an index, giving the names of manufacturers and their products

DO YOU SELL PAINTS?

If you do we want to sell you some of
THE SHERWIN-WILLIAMS PAINTS.

If you will work with us we will increase your paint business. Give us an energetic, intelligent business man and we care not what the conditions may be, what the competition may be; we can between us—your efforts and ours—secure in your territory the largest share of the paint trade. We can secure it, and we can **hold it and increase it.** That's what we have done in thousands of towns on this continent, and every week the number increases.

Our methods get the business. Our goods hold and increase it.

It's worth a great deal to any live dealer to work with, and handle, the products of a successful and progressive firm.

THE SHERWIN-WILLIAMS Co.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

**CLEVELAND
CHICAGO
NEW YORK
MONTREAL**

in the hardware, iron, metal and machinery trades. It has been prepared in response to the demand for a reliable index of the lines of business to which it relates, and the compilers hope it will be of service, not only to Americans, covering as it does a wide range and representing in detail a great variety of products.

THE BELLS.

Bells were well known to the Egyptians before the time of the Jewish exodus, says an exchange. In the description of Aaron's sacerdotal robe mention is made of the fact that upon the hem of the garment there were bells of gold, alternating with pomegranates of blue, of purple and of scarlet: "A golden bell and a pomegranate, upon the hem of the robe round about. And it shall be upon Aaron to minister, and his sound shall be heard when he goeth in unto the holy place before the Lord, and when he cometh out, that he die not." Hand bells were in common use all over the ancient world. The earliest use of bells in churches was for the purpose of frightening away the evil spirits which were believed to infest the earth and air, and the earliest curfew was rung at nightfall to rid the neighborhood of the village or town and church of demons.

Most old churches of Europe have a small door on the north side, and at certain points in the service this door was opened, and a bell was rung to give notice to the devil, if he chanced to be present, that he might make his exit before the elevation. By the command of Pope John IX., church bells were rung as a protection against thunder and lightning. The monument of Porsena, the Etrurian king, was decorated with pinnacles, each surmounted with a bell, which tinkled in the breeze. The army of Clothaire raised the siege of Sens on account of a panic occasioned among the men by a sudden chime from the bells of St. Stephen's Church. The largest bell in the world is in the Kremlin at Moscow. Its weight is 250 tons, and the value of the bell metal alone, not counting the gold and silver ornaments which were thrown into the pots as votive offerings, is estimated at £66,565, or about \$332,825.

F. G. Beckett, Hamilton, is the proud possessor of a medal presented to him by Prince Albert in 1851, at the first international exhibition in London, where he exhibited a steam engine built by him when only 20 years old and an apprentice in Manchester, his native city.

COST OF STEAM POWER.

A T recent meeting of the Association of Mechanical Engineers of Providence, R.I., a paper was read by F. W. Dean, of Boston, on "The Reduction in the Cost of Steam Power from 1870 to 1895, and the Outlook for the Future." Twenty-five years ago the most economical steam engine in use in mills was the Corliss simple condensing engine that used 19 or 20 pounds of steam per horse-power per hour. Previous to that time compound engines had been used in England in mill practice and simple engines had in many cases been changed to compound. In this country compound pumping engines had been used to a very limited extent, and the installation of the Morris engine at Lowell and the Leavitt engine at Lynn are notable examples of them in the early part of the period that we are considering. The Pawtucket, R.I., pumping engine, which was started on June 30, 1878, is another important example of economical pumping engines, and probably was the most economical engine that had been built up to that time.

While these engines are not mill engines, they influence the practice of builders of mill engines and can properly be considered with them. Pumping engines have always been the leaders in economy, but at the present time the best pumping and mill engines are practically equally economical. At the present time we may cite the Louisville pumping engine and some two or three mill engines, as at Grosvenordale, Conn.; Natick, R.I.; West Boylston, Mass., and Berkeley, R.I., as being almost on a par. It is now as easy to design an engine to use less than 13 pounds of feed water per horse-power per hour as it was to get down to 16 pounds in 1895.

The causes of this economy are: 1, steam jackets; 2, compounding; 3, reheaters; 4, and simultaneously with 1, 2, 3, higher steam pressure; 5, later combination of all the above with larger low pressure cylinders than had in general been used. While steam jackets date from the time of Watt, and the reheater from the time of Cowper, in the early sixties they had not in general been appreciated. At present there is a tendency to underrate them, but it is not to be forgotten that all the good records are obtained from jacketed engines.

It is safe to say that from 1870 to 1895 steam consumption of engines has steadily decreased from 20 pounds to 12½ pounds per indicated horse-power per hour. Other things being equal, this means a saving of coal of 37½ per cent. This has also carried with it a reduction in the number of boilers required of about the same per cent. Within this period of 25 years the use of exhaust steam for various purposes has ex-

tended, so that the steam power in various mills of certain kinds costs almost nothing for coal. In boilers there has been scarcely any improvement in economy of the prevailing type—viz, the horizontal return tubular boiler. There have been some improvements in grate bars tending to promote economy.

The vertical boiler is receiving the recognition that it deserves, and it is likely to displace the horizontal return tubular boiler, as it saves about 4 per cent. of coal compared with the latter, and, besides, provides moderately superheated steam, which in itself is productive of economy. Vertical engines are beginning to be appreciated, and I predict their increasing use in mills from this on. Their friction is less than in horizontal engines by some 6 per cent., and thereby a saving of about this amount of steam is in sight. There is also the economy which results from the use of economizers in the flue, and in the general case this saves 7 or 8 per cent. of coal; but as this is something extra, compared with the older plants, the fixed charges that go with this should be considered. They probably reduce the net saving in money to 4 per cent.

The remaining improvement that is now apparent, except the continued increase in steam pressure, which will soon reach 200 pounds, is superheated steam. There is now no difficulty in using this, as we have oil that will stand its use in cylinders. By its use a small engine has used 10.17 pounds of steam per 1 horse-power per hour, and it would seem that 10 pounds were within reach. Ten pounds can be compared with 12½ pounds, giving 20 per cent. saving over the best present practice. Finally, it should be remembered that the modern plant is not the most economical that can be installed at present, but far from it. Similar remarks can be applied to the plant of 1870. Now, looking a little further into the future, for the common use of highly superheated steam and its effects, it can without doubt reduce the consumption of steam to 10 pounds per horse-power per hour. Steam sufficiently superheated to do this is perfectly practicable to-day, and is used in a few plants in Europe. It has not been applied, however, to any high-grade engines.

A WARM COMFORTER.

How rich in color is her cheek,
And I have made it so,
For when with mine her lips I seek
It takes an extra glow.
Her mouth is large; it is not zest
That when 'tis full I like it best.
With her alone, when we commune
I spend a lot of time;
'Tis she can keep my heart in tune
And oft inspire a rhyme
Of comforters she's the true type,
My warmest friend—my meerschau pipe.

—Tribune.

CANADIAN IRON AND STEEL PRODUCTION.

THE production of pig iron in the Dominion of Canada in 1896, as ascertained from reports which we have received from the manufacturers, was 60,030 gross tons, against 37,829 tons in 1895 and 44,791 tons in 1894. The increased production in 1896 over 1895 was 22,201 tons, or over 58 per cent. Of the total production of 1896, about 1-10 was charcoal pig iron, and the remainder was coke pig iron. The Bessemer pig iron produced in Canada in 1896 amounted to 5,211 tons, the production being confined to one company. The unsold stocks of pig iron in Canada which were in the hands of the manufacturers or their agents on December 31, 1896, amounted to 29,320 tons, compared with 17,800 tons on December 31, 1895. About four-fifths of the unsold iron on hand at the close of 1896 was coke pig iron, the remainder being charcoal.

At the close of 1896 there were eight completed blast furnaces in Canada. Of this number two were in blast and six were out of blast on the date named. At the close of 1895 there were eight completed furnaces, of which four were in blast and four were out of blast. No new furnaces were built in 1896.

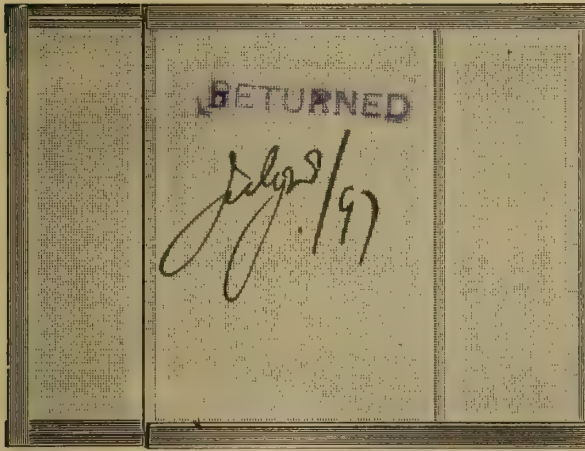
The production of crude steel and of iron and steel rolled into finished forms in Canada in 1896 was approximately as follows, full reports or careful estimates having been received by us from all the manufacturers in the Dominion. The production of basic and acid open-hearth steel ingots in 1896 was 16,000 gross tons against 17,000 tons in 1895, all made by the acid process; open-hearth steel rails, 600 tons, against 600 tons in 1895; structural shapes, 4,540 tons, against 4,560 tons in 1895; cut nails made by rolling mills and steel works having cut nail factories connected with their plants, 196,971 kegs of 100 pounds, against 208,042 kegs in 1895; plates and sheets, 1,820 tons, against 655 tons in 1895; all other rolled products, excluding muck and scrap bar, 59,290 tons, against 51,299 tons in 1895. Changing the cut nail production from kegs of 100 pounds to gross tons of 2,240 pounds, the total quantity of all kinds of iron and steel rolled into finished products in the Dominion in 1896, excluding muck and scrap bar, amounted to 75,043 tons, against 66,402 tons in 1895.

The number of rolling mills and steel works in Canada on December 31, 1896, was 16, against 15 at the close of 1895. One new mill was built and put in operation in 1896 at Bridgeville, Nova Scotia. Of the completed plants two rolling mills were idle during the whole of 1896.—From Statistics of the American Iron Trade for 1896.

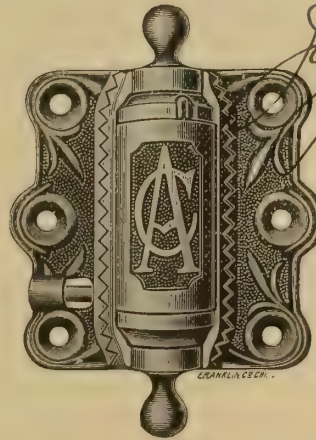
H. S. HOWLAND, SONS & CO.

WHOLESALE
HARDWARE

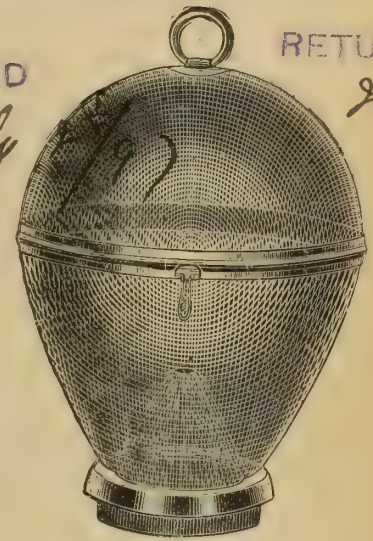
37 Front Street West, TORONTO.



No. 2. Window Screens, 18 in. high. Extends 20-33 in.
No. 3. " " 18 in. " " 24-41 in.
No. 4. " " 24 in. " " 24-37 in.



ARCADE SPRING HINGES.



BALLOON FLY TRAPS.



STAINED OR OILED

No. 1. Screen Door, 2 ft. 8 in. x 6 ft. 8 in.
No. 2. " " 2 ft. 10 in. x 6 ft. 10 in.
No. 3. " " 3 x 7 feet.



OILED

No. 100 x 1, 2 ft. 8 in. x 6 ft. 8 in.
No. 100 x 2, 2 ft. 10 in. x 6 ft. 10 in.



OILED

No. 102 x 1, 2 ft. 8 in. x 6 ft. 8 in.
No. 102 x 2, 2 ft. 10 in. x 6 ft. 10 in.

Orders Filled
Promptly

...GRAHAM Cut and Wire Nails are the Best...

Our Prices
Are Right

THE MAN AND THE OPPORTUNITY.

A BOY in England had been run over by the cars, and the bright blood spurted from a severed artery. No one seemed to know what to do until another boy, Astley Cooper, took his handkerchief and stopped the bleeding by pressure above the wound. The praise which Astley received for thus saving the boy's life encouraged him to become a surgeon, the foremost of his day.

"The time comes to the young surgeon," says Arnold, "when, after long waiting, and patient study and experiment, he is suddenly confronted with his first critical operation. The great surgeon is away. Time is pressing. Life and death hang in the balance. Is he equal to the emergency? Can he fill the great surgeon's place, and do his work? If he can, he is the one of all others who is wanted. His opportunity confronts him. He and it are face to face. Shall he confess his ignorance and inability, or step into fame and fortune? It is for him to say."

Are you prepared for a great opportunity?

"Hawthorne dined one day with Longfellow," said James T. Fields, "and brought a friend with him from Salem. After dinner the friend said 'I have been trying to persuade Hawthorne to write a story based upon a legend of Acadia, and still current there—the legend of a girl who, in the dispersion of the Acadians, was separated from her lover, and passed her life in waiting and seeking for him, and only found him dying in a hospital when both were old.' Longfellow wondered that the legend did not strike the fancy of Hawthorne, and he said to him, 'If you have really made up your mind not to use it for a story, will you let me have it for a poem?' To this Hawthorne consented, and promised, moreover, not to treat the subject in prose till Longfellow had seen what he could do with it in verse. Longfellow seized his opportunity and gave to the world 'Evangeline, or the Exile of the Acadians.'"

Of what value was the old story of Shylock and his pound of flesh (contained in a dozen lines) till Shakespeare touched it with his magic pen and transformed it into a realistic drama?

Open eyes will discover opportunities everywhere; open ears will never fail to detect the cries of those who are perishing for assistance; open hearts will never want for worthy objects upon which to bestow their gifts; open hands will never lack for noble work to do.

Everybody had noticed the overflow when a solid is immersed in a vessel filled with

water, although no one had made use of his knowledge that the body displaces its exact bulk of liquid; but when Archimedes observed the fact, he perceived therein an easy method of finding the cubical contents of objects, however irregular in shape. Everybody knew how steadily a suspended weight, when moved, sways back and forth until friction and the resistance of the air bring it to rest, yet no one considered this information of the slightest practical importance; but the boy Galileo, as he watched a lamp left swinging by accident in the cathedral at Pisa, saw in the regularity of those oscillations the useful principle of the pendulum. Even the iron doors of a prison were not enough to shut him out from research, for he experimented with the straw of his cell, and learned valuable lessons about the relative strength of tubes and rods of equal diameters. For ages astronomers had been familiar with the rings of Saturn, and regarded them merely as curious exceptions to the supposed law of planetary formation; but Laplace saw that, instead of being exceptions, they are the sole remaining visible evidences of certain stages in the invariable process of star manufacture, and from their mute testimony he added a valuable chapter to the scientific history of creation. There was not a sailor in Europe who had not wondered what might lie beyond the Western Ocean, but it remained for Columbus to steer boldly out into an unknown sea and discover a new world. Innumerable apples had fallen from trees, often hitting heedless men on the head as if to set them thinking, but not before Newton did anyone realize that they fell to the earth by the same law which holds the planets in their courses and prevents the momentum of all the atoms in the universe from hurling them wildly back to chaos. Lightning had dazzled the eyes and thunder had jarred the ears of men since the days of Adam in the vain attempt to call their attention to the all-pervading and tremendous energy of electricity, but the discharges of heaven's artillery were seen and heard only by the eye and ear of terror until Franklin, by a simple experiment, proved that lightning is but one manifestation of a resistless yet controllable force, abundant as air and water.

Like many others, these men are considered great, simply because they improved opportunities common to the whole human race. Read the story of any successful man and mark its moral, told thousands of years ago by Solomon: "Seest thou a man diligent in his business? He shall stand before kings." This proverb is well illustrated by the career of the industrious Franklin, for he stood before five kings and dined with two.—"Pushing to the Front."

TRICYCLE STREET SWEEPER.

A Berlin inventor has, according to an exchange, constructed a new street-sweeping apparatus which combines the construction of a carpet-sweeper with that of a tricycle. It is worked by one man, who can cover as much ground with this machine as four men working with brooms and shovels. Compared to the street-sweepers propelled by horses, the cost of covering a given ground is smaller; moreover, the new machines are widely superior on hygienic grounds, since the dust and sweepings are not thrown into the air, but absorbed by the machine and dropped in bulk into boxes specially provided for the purpose, which are to be sunk in the ground at different points and covered until called for during the night when there is least traffic in the streets. The new sweepers are intended to travel through the best streets at a fair rate of speed several times a day, and the receptacle for the sweepings will hold about 40 pounds before it becomes necessary to empty it. Sidewalks and footpaths in the parks are to be swept by similar but somewhat smaller machines.

HARDER TO BUY THAN SELL.

A traveling salesman made this rather singular remark the other day, says an exchange: "If I could buy goods as readily as I could sell them, I would go off the road and set myself up in business as a broker." What he meant to be understood by this was that it is easier to sell goods than to buy them, because the exercise of judgment in all respects is not so necessary. He is undoubtedly right, unorthodox as the statement may seem, although it is merely another way of saying that goods well bought are half sold. It is not always so much the character of the goods to be bought that perplexes the buyer as is the question of quantity and time. Goods may sell, yet never buy themselves, and when they are to be bought the degree of acute judgment is certainly more pronounced than is required when the same goods are sold over the retail counters."

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
. . . Manufacturers of the . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

. . . **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage
Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

Are You Interested in GAS RANGES?

If you are, it will pay you to place an

OXFORD

ON
YOUR
FLOOR

They will increase your Trade

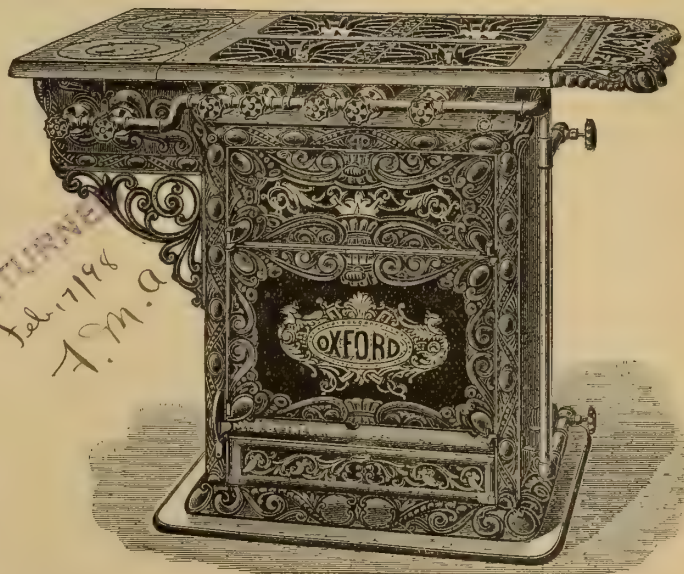
Features . . .

Largest Oven Made.
Spring-Balanced Drop Oven Door.
Flush Top Surface.
Removable Griddles over each Burner.
Improved, Powerful Cast Iron Burner and Tube.
Instantaneous Oven Burner Lighter.
Bodies Japanned and Baked Inside and Outside and Asbestos Lined.
Powerful Water Heater.
Very Economical in Consumption of Gas.
Perfectly Adjusted Needle Point Valves.
Simmering Burner with Each Range.

DRILLED OR SAWED BURNERS, AS DESIRED.

We manufacture this range with Single Oven, Single Oven and Water Heater, Double Oven (one Roasting and Baking Oven, and one Broiling and Toasting Oven), and Double Oven and Water Heater. We are the originators of this range with **BROILER OVEN ON TOP**, the convenience of which will at once be appreciated.

Send for Illustrated Catalogue and Price List.



Baking Oven, 18 x 18 x 12.
Roasting Oven, 18 x 18 x 6.

THE GURNEY FOUNDRY CO., LIMITED, TORONTO

The Gurney-Massey Co., Limited, Montreal.

SOLE AGENTS FOR THE QUICK MEAL, GASOLINE AND BLUE FLAME SUMMER STOVES.

THE GURNEY EXCURSION.

THE employes of the Gurney Foundry Company, Limited, of Toronto, held their fifth annual picnic on Saturday, at Oshawa. The excursionists left the city by steamer Garden City shortly after eight o'clock, arriving at their destination before noon. The sail down was a pleasant one. On arriving at the wharf the excursionists took the electric cars for Prospect Park, situated about three miles from the lake shore. This park is beautifully situated, and as ample arrangements had been made in the way of refreshments, games, etc., a highly enjoyable time was had.

The games consisted of foot races, bicycle races, and a base-ball match between the Rivals and the Chancellors, which was won by the latter. The Chancellors, be it known, represented the moulding shop, and the Rivals the fitting and mounting shop of the company. A characteristic feature of all the events was the rivalry between the different branches of the company's works.

Mr. Ed. Gurney the president of the company was on hand, coat on arm, an interested spectator of all that was going on. Mr. Carrick, the manager of the company, Mr. Alcock, sec.-treas. of the company, and Mr. Cromwell Gurney, were also on hand and took a great deal of interest in the various athletic events. Mr. Carrick became so enthusiastic that he issued a challenge for a bicycle race to Mr. J. Hallarn, the well known stove man of Queen street, Toronto. Mr. Hallarn would not accommodate with a bicycle race, but was prepared to run 100 yards, but much to the regret of the spectators no arrangements could be made between the gentlemen.

Whenever the Gurney company runs an excursion it is sure to have representatives present from the retail manufacturing trades. Among those who were noticed on Saturday last were: W. Thompson, of Gibson & Thompson; Mr. Wilson, of Wilson & Cousins, manufacturers of brass wire; Chas. Ransom, of the Toronto Furnace and Crematory Company; E. P. Washington, stoves, etc.; Mr. Gibbs, stoves, etc., Queen street east; S. Greer, Queen street east; George Hooper, stoves and hardware, Queen street west; and W. J. Hallarn, Queen street. A number of Oshawa merchants, customers of the company, also called at the park to fraternize with the excursionists. The excursionists reached Toronto about 11 o'clock after having had one of the most successful outings in the history of the company.

ALUMINUM FOR ROOFING.

It would seem that aluminum sheets afford an effective means for roofing buildings. Some time back the roof of the Berlin In-

dustrial Exhibition was covered with sheets of aluminum six mm. (.24 inch) thick and laid with polished surfaces outside. The result, it appears, has been very satisfactory, for the roof has withstood all climatic influences, weather, and changes of temperature, without showing signs of oxidation. So excellent, indeed, are the results, that experts express the opinion that aluminum will become a strong competitor with other materials for this work in the future.—Scientific American Supplement.

GEORGE J. TROOP.

MR. GEORGE J. TROOP, president of the Halifax Board of Trade, is one of the leading wholesale and retail hardware merchants of Halifax. He is wide-awake, progressive, and enjoys the confidence and esteem of the community in



MR. GEORGE J. TROOP,
President of the Halifax Board of Trade.

which he resides. He is also one of the best known business men in the Maritime Provinces, and has always been a faithful and warm supporter of any measure tending to advance the trade interests of the Dominion. There is nothing narrow or provincial in his ideas. While he naturally desires to see his native city and province prosper, he has always looked upon trade questions in their broadest sense, having the well being of the whole of Canada at heart. He was one of the strongest advocates of the fast line of Atlantic steamers, and naturally feels proud to-day to see his ideas taking practical shape. Mr. Troop has served as president of the Board of Trade on former occasions. He has been a delegate to Ottawa on almost every important trade mission, and at the present time is deeply interested in the proposed cable extension to the West India Islands. He is a member of the firm of Black Bros. & Co.

NEW BRUNSWICK FOR TOURISTS.

THE varied attractions of the picturesque province of New Brunswick have long rendered it celebrated among summer tourists who have always found that refreshment of mind and body so grateful to the toilers in towns or cities. Not a little of the celebrity of the province is due to its beautiful capital, St. John, a city which, with its central position, its unrivalled climate, its healthy breezes, and its proud position of gateway to a sportsman's paradise, renders it the hub of the Maritime Provinces.

By a glance at the map it will be seen that St. John is easy of access, and is in fact the distributing point of the Maritime Provinces. Here will be found the terminus of the C.P.R., and out of the same station which forms this terminus run the trains of the Intercolonial Railway, a line, which skirting as it does three-fourths of the coastline of New Brunswick, touches at innumerable points of interest to the tourist and sportsman. In the steamship service it is also an important point.

The chief attraction for the pleasure-seeker is the River St. John, which the inhabitants of the province claim has no equal in the world as a place for yachtsmen and scenery-admirers.

Along the river are many farm houses where the "summer boarder" is made welcome, and where a comfortable home may be found at a reasonable price. Here the simple and wholesome fare, the walks, the boating, the bathing, the flowers and all the requisites of a good summer resort are to be had without the least trouble.

If the traveler prefers a hotel and city life by the seaside there is abundant accommodation; it is sufficient here to mention the Royal, the Dufferin and the Clifton as the leading hotels of the city.

The city is not only healthy in its supply of pure water and breezes, but it also affords opportunities of every kind of pleasure to the tourists. The opera house is open all summer. The public park, covering about 128 acres, is the pride of the city. The drives and views to be obtained are varied and beautiful. Should an out-of-town resort be desired a quiet, cosy nook will be found at Duck Cove, about three miles from the city and reached by the street cars.

The climate of St. John at this season of the year is a most delightful one and offers every inducement to seekers of health and pleasure. On the warmest days the heat is tempered by refreshing breezes from the bay, while sultry and sleep-banishing nights are unknown. Neither mosquitos, black flies, or insects are to be found.

In fact, "the stranger in St. John finds a busy, prosperous and beautiful place—a city to be proud of and a people who are proud of it."

Cavalier and Pelham Bicycles

Being desirous of closing out the balance of our stock of Bicycles, we offer same to the trade

Write
For Figures.

At Cost Price

CAVERHILL, LEARMONT & CO. - MONTREAL

... Wholesale Hardware and Metal Merchants ...

Bicycles at Cost...

In order to clear out the balance of our stock we have decided to offer them at cost. **Phoenix**, men's and women's. **Erie**, men's only. **Jupiter**, men's only. Also Myers' Bicycle Stands and Home Trainers at cost.

Write for our figures, they may interest you.

Paris Green

50 lb. Drums.
1 lb. Papers.

Close figures and reduced prices.
Season is now at hand.
Order at once.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

DEATH OF MR. W. BUCK.

THE sad news was received from Brantford on Thursday that Mr. W. Buck, the founder and proprietor of the famous Buck Stove Works, had dropped dead from heart disease at Buffalo Bill's Wild West Show about 8 o'clock that evening. Mr. Buck was one of the most prominent manufacturers in Brantford, and, indeed, in Canada. His reputation as a stovemaker is continental, and his sudden death is a great shock to his own immediate friends and to the community as a whole. Deceased was in his usual good health, and, accompanied by his wife, his two married daughters and sons-in-law and his three sons, went to the Buffalo Bill exhibition, which was being given on the Agricultural grounds, that evening. He and his party got seated in the reserved portion of the auditorium. As the performance commenced Mr. Buck, who was sitting next the Mayor of Brantford, suddenly collapsed. His head fell forward upon his breast and the Mayor at once supported him. The show authorities immediately stopped the performance and Mr. Buck was removed to the open air and medical aid sent for. Nothing could be done, however, as the spirit of a good and just man had passed to the silent land beyond. The body was conveyed home in the ambulance wagon amid the profound regret of the thousands who were present. From a cursory examination the medical men are of opinion that death resulted from heart disease.

Wm. Buck was born in the township of Ancaster, in the county of Wentworth, August 22, 1828, and came from good old U. E. Loyalist stock, his grandfathers on both sides having been among that band of sturdy pioneers whose principles can be admired. The subject of this sketch was a child when his father, the late Peter Buck, came to Brantford, and was reared and educated and learned his trade here. In the year 1858 he began the manufacture of stoves, and in 1865 went into the present quarters. At that time the foundry was a small building, but as time rolled on and the full measure of success attended his efforts adjoining property was acquired, until now the works are very extensive and cover quite two blocks in the very heart of the city. Up to the year 1874 the business had gradually developed, but in this year Mr. Buck began the manufacture of the Radiant Home coal stove, the success and popularity of which were soon established in every corner of the Dominion. Later the Happy Thought range was placed on the market, and the two stoves have tended to give Mr. Buck's name household prominence everywhere in Canada.

Extensive additions were made to the works in 1875, 1878 and 1882, and in 1885 a large new building, 130 x 80 feet and five storeys high, was erected opposite the foundry for offices, warehouses and shipping department. From 150 to 200 men are constantly employed, and the variety of stoves manufactured is almost numberless. Wholesale branch houses have been established at Montreal and Winnipeg, from which the trade is supplied. Though giving his time largely to his own extensive business, Mr. Buck has had some time to devote to his city and to other schemes which commended themselves to him in the way of investment. At the resuscitation of the Board of Trade in 1879 Mr. Buck was its president for two years. He had been a director of the Brantford Young Ladies' College, a director of the Royal Loan & Savings Co. and was elected by the Baptist denomination a governor of the McMaster University, esteeming the latter a very high honor indeed. Like other successful and representative men, Mr. Buck began at the bottom of the ladder and wrought his way upwards through many difficulties. His success was achieved by industry, perseverance and attention to business.

A CHICAGO NOVELETTE.

CHAPTER I.

At 10 o'clock in the morning the cashier of the wholesale hardware house of Hatchet & Co. was seized with cramps. It was the first symptom of those distressing collapses which followed so swiftly and which made the terrific heat of the past forty-eight hours such a deadly thing.

At noon the bookkeeper gasped and succumbed.

Both men were sent to their homes in carriages, and the crippled establishment was left to get along as best it could.

CHAPTER II.

At 1.30 o'clock the stenographer announced that he must go and put ice on his head or his dissolution would follow.

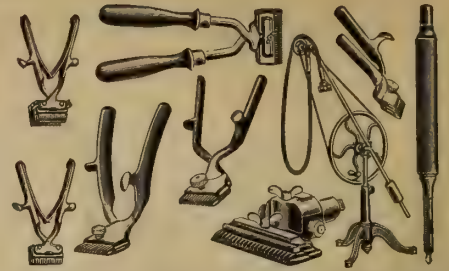
He was given permission to save his own life. A rag could not have been limper.

At 2 o'clock the three salesmen suddenly succumbed together. They attributed it to some soda water of which they had incautiously partaken.

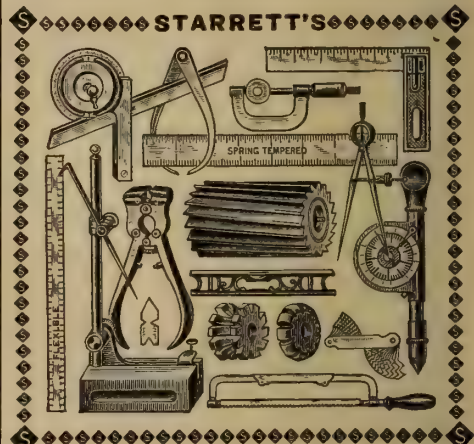
Mr. Hatchet was now left alone, save for the presence of one small office boy.

Presently he arose and put on his hat with a determined air.

"Tommy," he said, "I guess you and I had better go to the ball game, too."—Hardware Dealers' Magazine.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.



FINE TOOLS

98 Page Catalogue Free.

THE **STARRETT** CO.
L. S. Box 5
ATHOL, MASS., U.S.A.



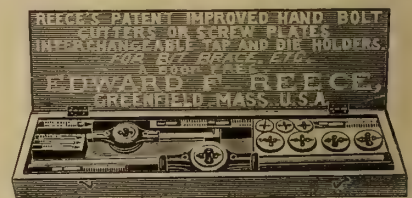
COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.



PERSONS addressing American advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS
PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

ESTABLISHED 1839

SEYMOUR CUTLERY CO.

Successors to Henry Seymour Cutlery Co.

Office and factory . . .

HOLYOKE, MASSACHUSETTS, U.S.A.

Every pair of Seymour Shears is fully warranted,
and if found imperfect from any cause will be replaced
with perfect shears.

Manufacturers of . . .

Shears, Scissors

and . . .

Sheep Shears



All Seymour Shears are water hardened and are the best made.

No commission house is sole agent for the genuine Seymour Shears. Write for catalogue and prices.

U.S. PIG IRON PRODUCTION.

THE first half of 1897 has just expired.

Within a few weeks statistics will be forthcoming showing the volume of business that has been transacted during the six months in comparison with previous periods. In respect to pig iron the statement will be satisfactory. It will probably show that during the past four years there have been only two periods of six months each which have surpassed in pig iron production the six months just closed.

Pig iron production for the first six months of 1897 may be roughly estimated to have been 4,350,000 tons. By half years the production has been since 1892 as follows:

	First half.	Second half.
1893	4,562,918	2,561,584
1894	2,717,983	3,939,405
1895	4,087,558	5,358,750
1896	4,976,236	3,646,891
1897	4,350,000	

It will thus be seen that since July 1, 1893, the only two periods of six months each in which pig iron production exceeded that of the first six months of 1897 were the second half of 1895 and the first half of 1896. During the half year just ended stocks have increased about 150,000 tons and making this deduction the consumption of iron has thus been in excess of the average during the past four years. Exports of pig iron for

the six months will probably exceed 120,000 tons, the total for the first four months of the year being 79,000 tons.—Industrial World.

AFTERNOON TEA.

A Canadian hardwareman recently won kudos by inviting over 500 citizens of Winnipeg to visit his model kitchen and take afternoon tea. Needless to add, the citizens, with their wives and their daughters, largely availed themselves of the invitation. The room was a sunny one on the second floor, and was furnished out with every imaginable kitchen requisite—stoves, ranges, aluminum pots and pans, asbestos mats for the stoves, saucepans, sieves and strainers and everything else. The tea was tempting and appetizing, the waiters were a smart little lad and a charming little lassie, both arrayed in appropriate cooks' costumes. The men talked politics, the ladies chattered, and the daughters said—"Oh! ma, do look at that!" Then they all went home, and our friend the ironmonger washed his hands in invisible soap. It was a great time, and although it only occurred a short time ago we expect that he has now retired from business. We commend the idea to every enterprising ironmonger, and would remind them that this is the weather when afternoon tea is entirely agreeable.—The Hardwareman.

"BISICLE, A PILE OF FUN."

The subjoined amusing item is said to be an order sent by a Kansas man to a bicycle company:

"Deer sirz—I live on mi farm near Hamilton, Kansas, am 57 year old and just a little sporta. My neffew in Indiana bot hisself a new bisicle and sent me his old one by frate, and ive learned to ride sume. Its a pile of fun, but my bisicle jolts considerable. A feller come along yesterday with a bisicle that had hollow injun robber tires stuffed with wind. He let me try hissen, and mi, it run like a kushin! He told me you sell injun robber just the same as hissen. How much will it be to fix mine up like hissen? Mine is all iron wheels. Do you punch the holler hole through the injun robber, or will I have to do it myself? How do you stick the ends together after you got it done? If your injun robber is already holler will it come any cheaper empty? I can get all the wind I want out here in Kansas free.

Yours truly,

"EBERNEZER Y. JENSON."

"P.S.—How much do you charge for the doodad you stuff the wind into the robber with and where do you start."—American Field.

ESTABLISHED 1860

INCORPORATED 1895

ELBOWS PLEATED



Made for 5, 6, 7 inch stove-pipe in Standard grade; also cheap line shorter and lighter than Standard.

WRITE FOR PRICES.

Also STOVE-PIPES, COAL HODS, STOVE BOARDS, Etc.

The THOS. DAVIDSON MFG. CO., Limited - MONTREAL

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, July 16, 1897.

HARDWARE.

THE trade in general hardware during the week has been of a fairly satisfactory character, especially shelf goods. The decline in barbed wire, however, has not led to any improved enquiry, and the same can be said of the changes in plain wire. Irregularity in the values ruling on wire nails still continues to be a prominent feature, but enquiry for them has been fair. Cut nails have not shown any marked increase in activity since the decline, while there has been a fair demand for horse nails and horseshoes. Screws, bolts and rivets have also maintained a good, healthy movement from jobbers' hands. Other lines remain much the same.

BARBED WIRE—There has been little change in the demand for barbed wire, enquiry being small, the decline having no appreciable effect. In round lots the base price is \$2.20, but in a jobbing way we quote \$2.25 f.o.b. Montreal.

PLAIN WIRE—Matters have ruled quiet in wire since the change, demand being of a very moderate character. Discounts are 30 and 5 per cent. f.o.b. Montreal in this province.

WIRE NAILS—There has been a fair enquiry for wire nails, but the range of values is irregular and we quote \$1.90 to \$2 f.o.b. Montreal, according to quantity.

CUT NAILS—Business has not altered materially since the reduction, trading being of a fair character. We quote \$1.85, with 10c. rebate to regular retailers f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—A quiet, steady trade has transpired in horse nails, with discounts as before at 50 per cent.

HORSESHOES—There has been a fairly good enquiry for horseshoes, the volume of orders, if anything, being larger than last week. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—The enquiry for screws has been well maintained. Discounts are as follows: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—A quiet

trade is doing, with discounts unchanged at 12½ per cent.

BOLTS—The movement in bolts continues quite brisk. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—These are equally active as bolts. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There is a fair enquiry for small assortments of cordage. We quote: Sisal, 7-16 and upwards, 5½c.; ¾, 6c.; 5-16 and ¼, 6½c., and 3-16, 7c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—Business quiet and discounts unchanged: 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—Quiet and steady at \$29.50 to \$31.50, as to brand.

ICE CREAM FREEZERS—As last reported.

HARVEST TOOLS—There has been a good enquiry for most kinds of harvesting tools.

SPADES AND SHOVELS—Business in these continues quiet.

BUILDING PAPER—There has been a fair movement in this, several good-sized lots moving out. We quote: Plain building, 30c. tarred lining, 40c.; and do. roofing, \$1.40.

LEATHER BELTING—Business remains much as it was. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

HINGES—There is a fair enquiry. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WIRE CLOTH—There is a steady demand for wire cloth and also for screen doors and blinds, stocks of which are extremely light.

CUTLERY—There is a quiet sorting trade passing in cutlery.

SPORTING GOODS—Continue much the same as they were a week ago.

SHOT—Steady. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buck-shot, 7c., less 17½ per cent. trade discount.

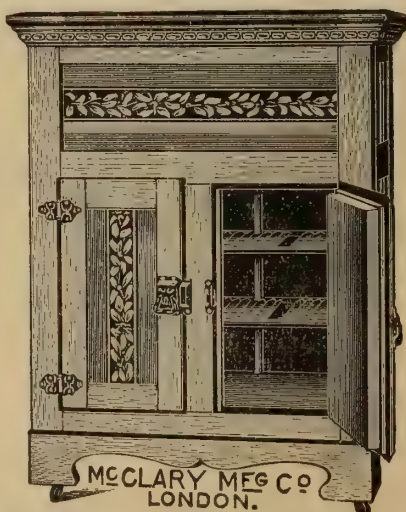
CEMENT—With light receipts during the past two weeks stocks of cement here have been well cleaned up, and the market is in good shape for what is on the way. Business has ruled quiet, while prices are steady. We quote: English brands, \$2 to \$2.10, and Belgian, \$1.90 to \$2.

FIREBRICKS—There is a good trade in firebricks, while prices are steady at \$16 to \$21 per 1,000, as to brand.

METALS.

There have been few further important changes in metals or heavy iron since last report, and business generally is of an extremely quiet character.

A GOOD Refrigerator



is a comfort while a poor one is not worth house room. We guarantee ours satisfactory.

Made of seasoned hardwood strongly put together and handsomely carved. Zinc lined and charcoal sheathed. Bronze locks and hinges, strong and of unique design. Ice racks and provision shelves strong and serviceable. Entire refrigerator easily cleaned.

The system of circulation, ventilation and insulation ensure a pure, dry, cold air.

Seven different sizes, with ice capacities from 25 lbs. to 180 lbs.

We have also a small quantity 1895 patterns, family size, which we will sacrifice at \$12.00 each.

The McCLARY MANUFACTURING CO.

London Toronto Montreal
Winnipeg Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cement

English, Belgian, German,
American and Canadian.

Calcined Plaster

F.F.F.F.F or Dental Rock Wall and
Asbestic Wall Plaster.

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST
AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in
all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs,
Boxing Gloves, Punching Bags, Base-
ball Goods, Camp Sets, Folding Furni-
ture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

PIG IRON—There has been some busi-
ness in pig iron, Summerlee changing hands
ex-wharf at \$17, and No. 1 Hamilton to the
extent of 1,000 tons was placed at \$15.25,
accordingly prices are rather lower.. We
quote: Hamilton, \$15.50 for No. 1, and
\$14.50 for No. 2; Ferrona, \$14 to \$15; Sie-
mens, \$14 to \$15; Summerlee, \$17 to \$18;
Carron, \$17 to \$18; Ayrsonne, No. 1, \$16;
Eglinton, \$16 to \$16.50; and Carnbro',
\$16 to \$16.50.

BAR IRON—The tendency of values is
still unsettled in bar iron, and buyers gen-
erally get what they want in the case of
negotiation. We quote \$1.35 to \$1.40.

BAND IRON—Is rather easier, sales being
made at 10c. reduction, and we quote \$1.65
as the base price this week.

HOOP IRON—Remains the same at \$2.25.

SHEET STEEL—There has been no change
in sheet steel since the recent reduction, and
we quote \$2.35 as the basis.

SHEET IRON—Business has ruled quiet at
the decline, \$2.25.

GALVANIZED IRON—Jobbing lots have
been moving from stock at \$4 to \$4.25, and
some considerable import orders are noted
this week.

TINNED IRON—There has been no change
in this line, which we quote at \$5.50 up to
20 gauge.

LEAD PIPE—Has met a good jobbing
enquiry at 7 to 7½c., with 30 and 5 off.

PIG LEAD—Values on pig lead are
steadily held at \$3.35 to \$3.50, business
ruling quiet.

INGOT TIN—This line has ruled rather
easier this week, trading being done at
15½c.

INGOT COPPER—Without alteration at 12
to 12½c.

SHEET COPPER—Jobbing out quietly at
14½ to 16c.

IRON PIPE—There is little to report,
values still showing irregularity. We
quote from \$1.87 on ¼ inch to \$7.87 on
2 inch black iron pipe; galvanized, from
4c. on ¼ inch to 11½c. on 1½ inch.

CANADA PLATES—There has been a fair
demand at the decline and prices are rather
steadier than they were last week at \$2.25
to \$2.30.

TIN PLATES—A fair enquiry has been
experienced for tin plates. We quote:
Coke I. C., \$3 to \$3.20; charcoal, I. C.,
Allaway, \$3.25; do, I. X., \$3.90 to \$4;
P. D. Crown, I. C., \$3.80; do, I. X.,
\$4.50.

BOILER PLATE—Continues as last report-
ed, at \$1.90 to \$2.

SOLDER—Dull, but steady, at \$5 to
\$5.25.

SPELTER—As last reported, at \$4.50 to
\$4.75.

ANTIMONY—Nothing new to report, with
prices unchanged at 9½ to 10c.

Cattle Ties

Do not purchase before seeing
our samples and prices. Our
Ties are the lightest, strongest
and best, and most satisfactory
line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Best Charcoal Rolled Iron

B. B. Axe Horseshoe Iron.

AND FACTORIES
MONTREAL

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

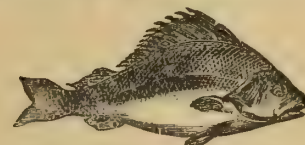
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



Trade Mark.

ALLCOCK'S STAG BRAND

goods are the best. When
you buy from us you buy
from the largest makers
and oldest house in Eng-
land. Established 1800.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION
HAMMOCK MANUFACTURING CO., Paris, Ont.

SCRAP IRON—No further contracts are noted, and values are nominal at \$12 to \$12.50.

PAINTS AND OILS.

The improvement noted in white lead is maintained, as is also the firm tendency. Mixed paints continue in fair enquiry, while there has been no further change in other lines.

WHITE LEAD—In good enquiry at steady prices. Government standard, \$5; No. 1, \$4.62½; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—Remains as last reported, at 4c. in casks and 4¼c. in kegs.

LIQUID PAINTS—All kinds are well enquired for.

SHELLAC—Dull but steady at 25c.

PARIS GREEN—Quite a few orders noted, 13½c. in drums and 14½c. in packets.

LINSEED OIL—The easy feeling has continued, and we quote: Raw, 41 to 42c.; boiled, 44 to 45c.

TURPENTINE—The easy feeling at primary markets checks business in turpentine. We quote 42c. in single bbls., and 41c. nett in larger lots.

VARNISHES—There has been a good enquiry for varnishes at prices current.

SEAL OIL—Steady at 40c.

COD OIL—Quiet at 31c.

NAVAL STORES—Without change. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c½. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

The glass market rules quiet and unchanged. We quote first break, \$1.25; second break, \$1.35 per 50 feet; third break, \$2.80 per 100 feet.

ASHES.

As reported last week, first pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

There has been a fair demand for small lots, but no large quantities are moving. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

There has been no further change in hides and we quote: No. 1, 7c.; No. 2, 6c. and No. 3, 5c.

PETROLEUM.

There is only a quiet jobbing business passing in petroleum. We quote: Canadian, in car lots, 13½c.; smaller quantities, 14½c.; American prime white, car lots, 17c.; smaller 18c.; water white, car lots, 18½c.; smaller, 19½c.; Pratt's astral, car lots, 20½c., and smaller, 21½c.

COAL.

Continues unchanged. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

The price of band iron has been reduced here 10c. in line with the easier feeling in bar.

Buyers still have distinctly the best of it in the case of all negotiations regarding supplies of bar iron.

The irregular tendency of values on wire nails is not by any means dissipated, and it is claimed that even small lots can be had for less than \$2.

Sales of round quantities of Hamilton pig iron have been made here at a reduction of 50c. per ton, and the jobbing range is lower in consequence.

ONTARIO MARKETS.

TORONTO, July 16, 1897.

HARDWARE.

THE worst that can be said of trade is that it continues steady, and up to the good standard noted these last few weeks. All harvest tools and churns, screens and freezers are in exceptionally good demand. The particular feature in the market is the heavy run on cradles; the manufacturers of scythes not being able to turn out enough of their products to supply the demand. Although the trade in cut nails cannot be considered an improvement on last week's business, the orders for wire nails continue to be heavy. Orders for tinware are still numerous. Trade in barbed wire maintains a steady tone. There is a continued activity in bolts, rivets and burrs. Horseshoes have a good sale.

BARB WIRE—The lower price has not materially affected the barb wire trade. It continues steady. We quote: \$2.20 f.o.b.

Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

WIRE—The demand has shown no material advance. Discounts, 35 per cent. off the list. Terms, 4 months, or 3 per cent. off 30 days.

WIRE NAILS—There is no change worthy of note in either price or demand. Trade continues to be fairly good. We quote base price at \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburgh does not exceed 21c. in less than car-load lots.

CUT NAILS—Trade is rather quiet. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is improving. The discount remains at 50 per cent.

HORSESHOES—Show a considerable improvement in demand. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—An active demand still characterizes the trade. Discounts are now as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Business is quiet. Discounts, 12½ per cent.

BOLTS—Business in this line continues active, with discounts as before. Discounts are: Common bolts, 3-16, ¼, ½ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ¾ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

BRASS BUTTS—Discounts are 17½ per cent. There is no change in trade. It continues rather brisk.

RIVETS AND BURRS—Tinned rivets are

Binder Twine.

HOBBS HARDWARE
CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

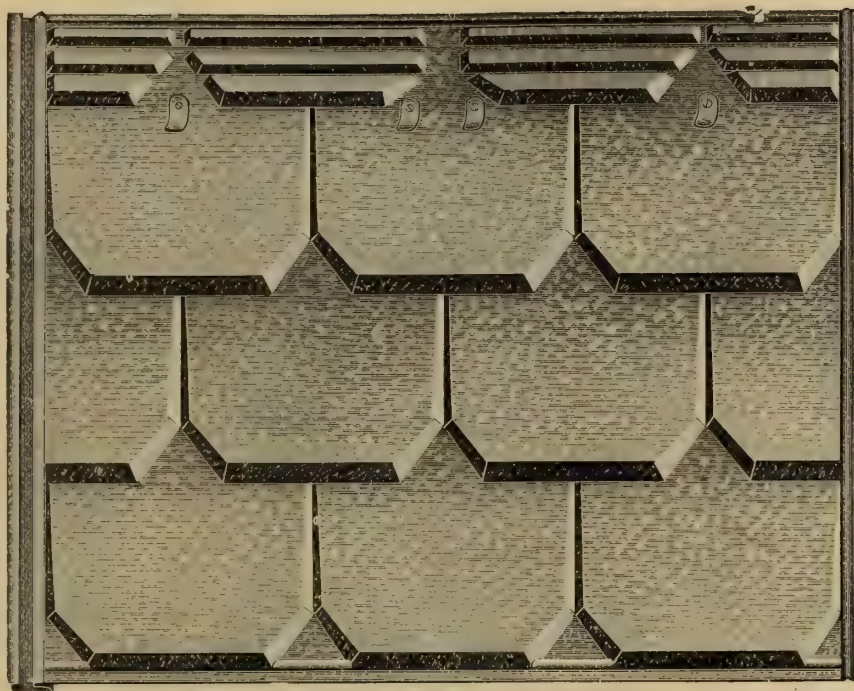
PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

The "Eastlake" Patent Shingle

The only original shingle fastened with a cleat and having a telescopic side lock and concealed water gutter.

Beware of Cheap Imitations.



SHOWS ONE SHINGLE.

The Eastlake Shingles are made from Galvanized or . . . Painted Steel of the

Finest Quality Only.

IMPORTANT INFORMATION

When you purchase a bushel of wheat you expect to get 60 lbs., no matter what grade it is, because that is the standard weight fixed by law. There is no law saying what metallic shingles shall weigh, and the only safe rule is to demand from manufacturers of these goods a list of weights, and see that goods you buy fully come up to this.

If one maker sells you goods guaranteed to weigh 80 lbs. at \$3.20 per square, that is 4c. per lb.; if some one else offers you goods claimed to be "just the same" at \$3.00 per square, his goods may only weigh 70 lbs., and this at the same rate (4c. a lb.) should only make the price \$2.80 per square. Thus the shingles claimed to be "just the same" are 20 cents per square higher than the guaranteed goods, made by an honest maker, out of honest materials, by honest workmen.

MORAL: Deal only with honest, reliable makers, who have some reputation and capital at stake.

We believe that constant attempts are being made to deceive the public who do not happen to be judges of the various roofing and siding plates made by different makers, and we therefore wish to point out to you that the **APPROXIMATE AVERAGE WEIGHTS** of the goods made by us are as follows, EXCLUSIVE OF THE PACKAGES:—

GALVANIZED "EASTLAKE" SHINGLES.

No. 1 grade, 105 lbs. per square.
No. 2 " 94 " "
No. 3 " 82 " "

PAINTED "EASTLAKE" SHINGLES.

No. 1 grade, 93 lbs. per square.
No. 2 " 83 " "
No. 3 " 70 " "

**THE BEST
IS THE
CHEAPEST**

BRICK'OR MANITOBA SIDING PLATE.

No. 1 grade, 77 lbs. per square.
No. 2 " 68 " "
No. 3 " 57 " "

**THE BEST
IS THE
CHEAPEST**

All the Above Weights are Exclusive of the Packages.

We do not guarantee that all sheets are of exactly the same thickness, as it is impossible to supply all sheets exactly alike; the above weights are, however, the approximate average weight per square, so that you see exactly what we are offering you, **QUALITY, WEIGHT AND SUPERIOR CONSTRUCTION** being our first consideration. We do not aim at selling the lowest priced goods in the market, but do aim at selling the **BEST**.

Kindly take the above facts into your consideration.

We are the original makers of metallic goods in Canada, and make and sell more than all others combined.

If you want to know why, write us and we will tell you.

The Metallic Roofing Co. of Canada, Limited

Cor. King and Dufferin Sts.

TORONTO, ONT.

slow, but all other lines are moving actively. We quote: Carriage, section, wagon box rivets, etc., (steel), 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE — Business continues brisk, although the orders are not for large quantities. We quote as follows: Sisal, 7-16 in. and larger, 5¾c.; ¾ in., 5¾c.; ¼ and 5-16 in., 6¾c.; 3-16 in., 6¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS — Trade is falling off in this line. Not many orders are coming in as stocks are all supplied. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS — Business is about the same as a week ago. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS — Trade in all lines continues brisk in rush orders, and makers have found it impossible to supply the demand, particularly in scythes. Discount, 60 and 10 per cent.

SPADES AND SHOVELS — The demand is gradually slackening, as the orders have not been as frequent. Discount, 45 per cent.

BUILDING PAPER — The improvement noted last week has continued. There are no new prices to announce. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING — Trade is moderate, and continues without feature. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE — Enamelled ware is moving very actively; tinware is not in an equal demand.

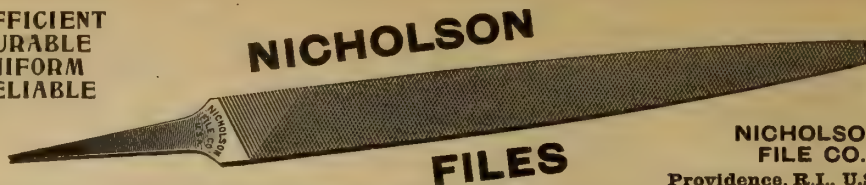
HINGES — Business is active, particularly in barn door hinges: We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35.

CUTLERY — Nothing new has developed in this line; stocks are being filled up, and it is only for this purpose that small orders are coming in.

SPORTING GOODS — It cannot be said that business in this line has shown any perceptible improvement.

SCREEN DOORS AND WINDOWS — The demand still continues so heavy that jobbers have not caught up with orders, manufac-

**EFFICIENT
DURABLE
UNIFORM
RELIABLE**

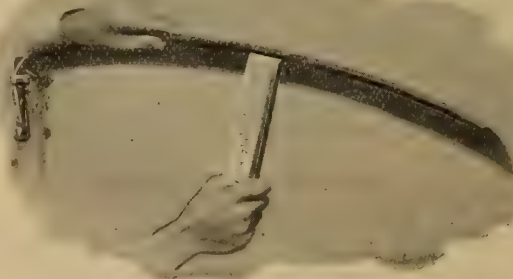


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FILE CO.
Providence, R.I., U.S.A.**



Guaranteed to be the Best Preservative of Metals. Not Vaseline. Will retain its form in any climate. Not affected by heat or cold. Will NOT grow RANCID. Least required to coat work thoroughly. Use it to protect your tools. Largest Tube and Best Quality. A Superior Lubricant for Bicycle Chains and Metals. Write regarding this or the best Repeating Rifles to

THE MARLIN FIRE ARMS CO., New Haven, Conn., U.S.A.



To Whet a Scythe...

properly requires a good
Scythe Stone.

**Pike's BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively **Scythe Stones**
the best on earth.

Pike's Lily White Washita OIL-STONE
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

turers being able to only partially supply the trade.

POULTRY NETTING — If anything trade has dropped a little. Discount, 67½ per cent.

GREEN WIRE CLOTH — Orders continue frequent. Price is \$1.35 per 100 square feet.

GARDEN HOSE — Business is much about the same as it was a week ago. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT — Small orders continue to pour in. There has been no change in prices, and no alteration is looked for inside of a few weeks. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The only change to note is in pig iron, of which the American variety has advanced 50c. a ton. Business continues much about the same as it was a week ago.

PIG IRON — The tendency to stiffer prices has at last taken form in an advance of 50c. Although we have heard nothing about any Canadian change, we presume that these prices will also be affected. We quote: Ham-

ilton No. 1, in 100 ton lots, \$15 per ton No. 2, \$14.50; Southern soft, \$15.50 for No. 1, and \$15.15 for No. 2; Southern foundry, \$15.75 for No. 1; \$15.25 for No. 2, and \$15 for No. 3; Niagara, No. 1, \$14.80; No. 2, \$14.30.

BAR IRON — Business continues good. We quote base price at \$1.40 in carload lots and \$1.50 in smaller quantities.

HOOP AND BAND IRON — Business is quiet and prices unchanged at \$2.25 per 100 lbs.

SHEET STEEL — Trade has undergone no change during the past week. We quote as follows: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON — An improved business is to be noted in black iron. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON — Trade shows some improvement and prices remain as before. We quote: Queen's Head (case lots), 16

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

U. S. A.

SEND FOR

Catalogue...

of our Fall
line of

HARDWARE SPECIALTIES



NO. 2 CLEAVER

Straight Edge Family Cleaver. Best cast steel, forged; with heavy steel ferrules. Perfectly balanced.

gauge, $3\frac{3}{4}$ c.; 18 to 24, 3.75c.; 26, 4c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (ton to $\frac{1}{2}$ -ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are $\frac{1}{8}$ to $\frac{1}{4}$ c. per lb. higher than figures named.

TINNED IRON—Orders for heavy gauges continue frequent, while the lighter gauges, although moving somewhat, are not having as active a demand. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.13; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{3}{4}$ to $7\frac{3}{4}$ c. per lb.

LEAD PIPE AND TRAPS—Business has been fairly well maintained. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—Business continues active. Discount, 60 and 10 per cent.

PIG LEAD—A few more good sales have been made this week. Prices remain the same, imported being quoted in ton lots at $3\frac{1}{2}$ c. per lb., and in smaller quantities at $3\frac{3}{4}$ c. per lb.

INGOT TIN—Has been in fair demand during the week at $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb.

INGOT COPPER—Trade has ruled quiet. We quote: $11\frac{1}{4}$ c. for quantities and $12\frac{1}{4}$ c. for small lots.

SHEATHING COPPER, ETC.—Case lots of sheathing iron have been sold this week. Altogether the movement has been fair. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Business remains about the same as it was a week ago. We quote per 100 feet net: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ -inch, \$1.87; $\frac{1}{2}$ -inch, \$2.10; $\frac{3}{4}$ -inch, \$2.45; 1-inch, \$3.40; $1\frac{1}{4}$ -inch, \$4.50; $1\frac{1}{2}$ -inch, \$5.87; 2-inch, \$7.87. Galvanized, $\frac{1}{2}$ -inch, 4c.; $\frac{3}{4}$ -inch,

$4\frac{3}{4}$ c.; 1-inch, $6\frac{3}{4}$ c.; $1\frac{1}{4}$ -inch, $10\frac{1}{4}$ c.; $1\frac{1}{2}$ -inch, $11\frac{1}{2}$ c.

RANGE BOILERS—Business continues moderate. We quote: Galvanized, 30 gallons, \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Orders are coming in a little better, but only for small lots, as most of the dealers throughout the country have placed orders for import. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$3.

TIN PLATES—Although business is not particularly brisk, it maintains a steady tone. Again, a few round lots were reported. We quote: Cokes, \$3 to \$3.10 for 14×20 ; do. squares, \$3.15 to \$3.25; \$6.25 for 20×28 ; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Orders are still frequent. We quote: $\frac{1}{4}$ in., $4\frac{3}{4}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Business keeps fair. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Only a few enquiries have been received during the week. We quote: IC, \$6.25 to \$6.50; IX, \$8.

SOLDER—Trade is still fair. We quote: Standard, $10\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Is moving a little more freely. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

The orders in glass have been numerous during the past week and trade is improving somewhat. Double diamond is particularly in good demand. Prices are still uncertain, but are inclined to be stiffer than they were a week ago. We quote window glass: First break in 50-foot boxes, \$1.20 to \$1.25, and in 100-foot boxes, \$2.30 to \$2.40, Toronto, Hamilton and London.

OLD MATERIAL

The trade in iron has considerably improved during the week, but dealers say that trade is dull yet. People are just be-

coming accustomed to the new prices. The Montreal markets continue to be utilized and the rolling mills are now purchasing their scrap in the States. The rag trade is moderate and the finer metals are moving lively. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb.; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

PAINTS AND OILS.

Although the trade continues fair, there are unmistakable signs that the orders will soon cease arriving. There is considerable movement in turpentine, but, as might be expected, the principal feature of the week's business is the constant receipt of rush orders for Paris green. This is, however, not likely to last; in fact, another week will likely bring the end of it. There are no changes in prices in any line. The trade in leads is fair.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77 $\frac{1}{2}$; No. 2, \$4.40; No. 3, \$4.02 $\frac{1}{2}$; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—\$1.90 per barrel.

CASTOR OIL—In cases, 8½c. per lb. and 9c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

PARIS GREEN—Kegs, 13c.; drums, 13½c.; 1-lb. cartoons, 14c.; ½-lb. packages, 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 43c.; 5 to 9 barrels, 42c.; Boiled, 1 to 4 barrels, 46c.; 5 to 9 barrels, 45c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. There has been no cutting in turpentine revealed yet. The feeling is however easier, and American quotations are a trifle lower.

HIDES, SKINS AND WOOL.

HIDES—Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3. Steerhides: 60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Trade is brisk and prices are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Deatons, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins, 50c.; pelts, 25c.

WOOL—The trade in wool is now dull, owing to all of the cut having gone out of the country to the States. There is almost nothing doing. The dealers are now paying 19 to 20c.

PETROLEUM, ETC.

The demand for lubricating oils continues on the increase, in spite of the fact that stocks were well filled. The trade in petroleum has now assumed its summer dull tone. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14½c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

Trade is much about the same as it was a week ago. Anthracite is quoted at Buffalo and bridges: Grate, \$4.27; egg, \$4.50; stove, \$4.50; chestnut, \$4.50.

MARKET NOTES.

Pig iron has advanced 50c.

Mr. W. McNally, of Montreal, was in Toronto last week.

Mr. Holden, of Sanderson Percy & Co., is away on his vacation.

A. C. Leslie & Co. are now handling "Pioneer" brand of pig iron.

H. S. Howland, Sons & Co. have just received a shipment of White's Everlasting door knob. Some of this knob's advantages are that it will not break nor pull off, that it can be instantly adjusted to any thickness of door without using washers to fill the vacant space on spindle, and that there are no small screws to work loose and allow the knob to pull off nor annoy the carpenter when fitting them in place.

UNITED STATES MARKET.

NEW YORK, July 16, 1897.

PIG TIN—About 250 tons are to hand on the Mohawk, making some 960 tons received thus far this month, but supplies appear to be well controlled, and in the absence of any unfavorable turn in the London market prices remain quite steady. As far as could be learned, no sales were made at less than 13.85c. cash, on dock or in store. Most business was on the basis of 13.90 to 13.95c. f.o.b. for lots of five tons and over.

COPPER—There is little change in the character of business passing, and, outside of export movement, the volume is moderate. The demand generally is slow and conservative, yet sufficient to hold prices quite steady at 11½ to 11¼c. for Lake Superior ingot, 10⅞ to 11c. for electrolytic and 10⅞ to 10⅞c. for casting stock. London cables quoted slightly lower prices on merchant bars, with fairly large business.

PIG LEAD—A dull sort of market is still experienced, since neither consumers nor jobbers extend their interest to other than moderate quantities, while speculation is momentarily lifeless in this quarter. Prices are quite steady, however, at 3.70 to 3.72½c. London cable quoted £12 3s. 9d. for soft Spanish.

SPELTER—The market remains without change in any respect. Only moderate business is taking place here and the demand continues tame, but prices are held fairly firm at 4.25 to 4.35c. western. London cable quoted £16 17s. 6d. for good merchant brands.

ANTIMONY—The market remains quiet, but is fairly steady at 6¼ to 7½c., according to brand and quantity.

TIN PLATE—Business of very fair amount is being done in American cokes, chiefly for future delivery, at former low prices. Otherwise the market remains quiet, with weakish undertone.

IRON PIPE PRICES WITHDRAWN.

The manufacturers of iron pipe have notified the trade in Montreal and elsewhere that all prices are withdrawn for the time

being in consequence of the labor troubles and other complications in the United States that have led to depreciation across the lines. The makers in Canada have not, at this writing, figured out what the advance will be, but an appreciable advance is certain to go into force before the beginning of next week.

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with Flint or Sand Papers.

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Barrister, Solicitor, Notary, Etc.

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Cable "LeVesconte" Toronto.

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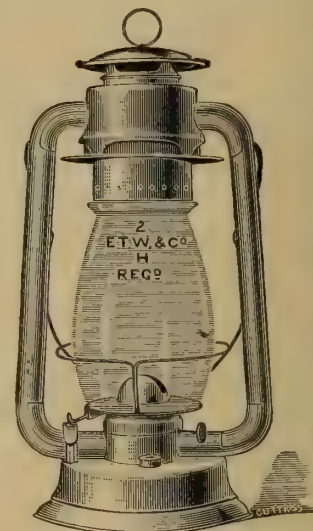
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Tubular and
Cold Blast
Lanterns

Bird Cages
Mouse Traps
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Stamped
Re-tinned
and Japanned

..TINWARE



HAMILTON - CANADA.

"It's the Wick
Does the Trick"

Wolff-American
High Art Cycles.

Have
Self-
Oiling
Bearings.

REQUIRE NO ATTENTION — HOLLOW
AXLE CONTAINS WICK HOLDING ENOUGH
OIL FOR 1,500 MILES OF RIDING.

DORKEN BROS. & CO.

MONTREAL.

MANITOBA MARKETS.

WINNIPEG, July 16, 1897.

TRADER remains in about the same position as last week, but a move is expected shortly. The travelers are now on the road with fall samples and orders may be expected to come in almost immediately. Preparations are active for the Industrial Exhibition which opens next week, and an enormous attendance is expected. The number of entries largely exceed those of former years. One of the new features of interest will be the exhibit of minerals from both Western Ontario and British Columbia. The weather promises to be all that could be desired, and as the railway rates are extremely low there is everything to encourage attendance. Many improvements have been added to both grounds and buildings. Rumors are in circulation in regard to a big thing in elevator building which is now on the tapis, but definite information for publication will not be forthcoming until next week. It is understood, however, to be quite the biggest thing attempted in this country up to date. Prices are as follows :

WIRE—Galvanized barb wire, \$2.65 to \$2.85 100 lbs.; plain wire and staples, \$2.75 to \$2.80.

ROPE—Sisal, lb., 6¼ to 6½c. base; manilla, lb., 7¼ to 8c. base; cotton, ¼ to ½ inch and larger, 16c. lb.

AXES—Per box, \$6 to \$9.

NAILS—Cut, keg, base price, \$2.50 for 20 to 60d., with new classification of extras; common steel wire nails, 4½ to 6 inch, \$2.65 per keg, with usual extras for smaller sizes.

HORSE NAILS—Pointed and finished oval heads. List price as follows : No. 5, \$7.50 box; No. 6, \$6.75 box; No. 7, \$6 box; No. 8, \$5.75 box; Nos. 9, 10 and 11, \$5.50 box. Discount off above list price 45 per cent.

TIN—Lamb and Flag, 55 and 28 lb. ingots, per lb., 19 to 20c.

TIN PLATES—Charcoal plates, I. C., 10 x 14, 12 x 12 and 14 x 20, \$4.50 to \$4.75; I.X., same size box, \$5.75 to \$6; I.C. charcoal, 20 x 28, 112 sheets to box, \$8.50 to \$9; I.X., box 20 x 28, 112 sheets, \$10.50 to \$11.

TERNE PLATES—I.C., 20 x 28, \$8.50 to \$9.

IRON AND STEEL—Bar iron, 100 lbs., base price, \$2.15 to \$2.25; band iron, 100 lbs., \$2.65 to \$2.75; Swedish iron, 100 lbs., \$5.25 to \$6; sleigh shoe steel, \$3 to \$3.25; best cast tool steel, lb., 9 to 11c.; Russian sheet, lb., 12 to 13c.

SHEET IRON—10 to 20 gauge, \$3.; 22 to 24 and 26 gauge, \$3.25; 28 gauge, \$3.50.

CANADA PLATES—Garth and Blaina, \$3.15.

GALVANIZED IRON—American, 20 gauge, \$4; 22 and 24 gauge, \$4.25; 26 gauge, \$4.50; 28 gauge, \$4.75 100 lbs.

IRON PIPE—Is quoted as follows per 100 feet: ¼-inch, \$2.50; ⅜-inch, \$2.75; ½-inch, \$3; ¾-inch, \$4; 1-inch, \$5; 1¼-inch, \$7; 1½-inch, \$8.50; 2-inch, \$11.50.

LEAD—Pig, per lb., 4½c.

SHEET ZINC—In casks, \$5.65, broken lots, \$6.

SOLDER—Half-and-hal (guar.) per lb.; 14 to 16c.

AMMUNITION—Cartridges, rim fire pistol, American, discount 40 per cent.; rim fire cartridges, Dominion, 50 and 5; rim fire military, American, net list; central fire pistol and rifle, American, 12 per cent.; central fire cartridge, Dominion, 30 per cent.; shot shells, 12 gauge, \$6 to \$7.50; shot, Canadian, soft, 5½c.; shot, Canadian, chilled, 6c. Robin Hood powder, 17-lb. kegs, \$10; ¼ kegs, 4¼ lbs., \$3; canister, 9-oz., 60c. Loaded shells, 12 gauge, soft shot, \$18 per 1,000; No. 10 gauge, \$20.70 per 1,000.

PAINTS, OILS AND GLASS.

WHITE LEAD—Pure, \$5.75 per 100 lbs.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, 5½c.; yellow ochre, in barrel lots, 2½c.; less than barrels, 3c.; golden ochre, barrels, 3½c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, 3½c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, 2½c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, 4½c. per lb.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown Japan, \$1; house-painters' gold size, Japan, \$1.50; coach painters' do., \$2 to \$2.25; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

SUNDRIES—Glue, S. S., in sheets, per lb., 12½ to 15c.; glue, white, for kalsomin-ing, 16 to 25c.; stove gasoline, per case, \$4; benzine, per case, \$4. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$7. Portland cement, per barrel, \$4 to \$4.25; plaster, per barrel, \$3.25; plasterers' hair, P.P., 90c. per bale. Putty, in bladders, barrel lots, 2½c per lb.; do., in 100 lb. kegs, 2¼c.; do., less than barrels, per lb., 3c. Alabastine, cases of 20 pkgs., \$6.50 to \$7.50, as to color.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

LINSEED OIL—Raw, gal., 50c.; boiled,

gal., 53c. in barrels; less than barrels, 5c. gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, 55c.; less than barrels, gallon, 58c. An additional charge for packages for small quantities.

OILS—Range about as follows: Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 11c. per lb.; tanners' or harness oil, 65c.; neatsfoot oil, \$1; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

REFINED PETROLEUM—Prices here are as follows: Silver Star, 18½c.; Crescent, 22½c.; oleophene, 23½c. in barrels. Car lots, 1c. per gal. less. United States oils in barrels are quoted at 27c. for eocene and 24c. for sunlight.

CHANGED TIMES IN ENGLISH HARDWARE.

But it is not only in the direction of production that things have changed, for distribution takes place upon very different lines. It would be interesting if one could find and interview an ironmonger who was in business when Her Majesty came to the throne in 1837. What changes he would have to talk of! The ironmonger of to-day is per se a shopkeeper, and can get most of his goods made ready for sale. In those days he was frequently a blacksmith as well, he made nails and turned out large quantities of ironwork, his shop was oftener than not a dirty, evil-smelling, badly-lighted den, and now it is roomy, has a plate glass front and is stocked with gaily-finished goods. Both master and workman worked from sunrise to sunset, the apprentice went to hard work at an age when now most boys are at school, and there were no half holidays or facilities for an occasional evening's entertainment. We often talk of "hard times," but our ironmonger of 1837 would tell us, if we could get at him, that we have never known what hard times are. Had we lived in the early part of the Victorian era we might have had cause to grumble, though it is doubtful whether we should have grumbled more loudly than we do to-day, for discontent appears to develop simultaneously with our material progress. It is hardly fair to ourselves or others.—Ironmongery.

WHITE LEAD MAKERS MEET.

The manufacturers of white lead had a meeting at the Windsor Hotel in Montreal last Wednesday. The question of an advance in prices, it is understood, was seriously discussed, but eventually, owing to certain conditions prevailing at present, it was decided to make no change from the existing scale.

Plumber and Steam-Fitter

A DELEGATE'S IMPRESSION.

HAVING been appointed a delegate from our association to the convention of the master plumbers which met in Pythian Hall, Toronto, Dominion Day, July 1, from an eastern city, I cannot allow this, the season of my first visit to the Queen City of the West, to pass off without in my humble way expressing to my fellow-craftsmen of Toronto and to hospitable citizens our thanks for their kind and generous treatment of us during our stay in their beautiful city, which in years to come will be treasured as one of the brightest periods in our lives. Toronto has the reputation of being an ideal city in which to hold conventions, as witness the many associations which are to meet during the summer and autumn months, some of which are continental and world-wide in their reputations, such as the Epworth League and the British Association for the Advancement of Science, which are to meet in the city in a short time. At the former 30,000 to 40,000 delegates are expected from all parts of America, and at the latter the eminent scientists of the world are to meet together in convention, and as a result of the good they will do men will rise and call them blessed. And why not the master plumbers, who in a large measure hold the health of the community in their hands? From the strides which have been made in the science and art of plumbing during the Victorian era, at the dawn of which plagues and epidemics were called visitations of the wrath of God, well may the public arise as one man and offer to us the glad hand for being enabled, by mutual exchange of ideas, to so place the dwellings we live in free from the germs of disease. Such is the good work that our association is doing.

But it is not my intention in this article to go into detail of the many matters which were brought up at the convention, but to simply express my appreciation of the handsome manner in which we were entertained during our stay in the city, and also for the benefit of the many master plumbers of Canada who were unable to be present with us, not with any idea of making them feel badly, but to realize what they missed. I am sure they will be delighted to hear of the glorious time we had while in Toronto and

elsewhere as guests of the local masters' association.


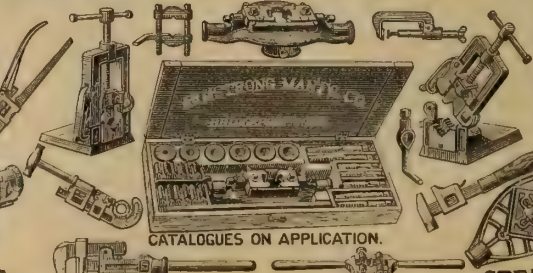

On our arrival in Toronto we were received by the Entertainment Committee and after our afternoon's work we were in the evening taken across the bay to the Island in a large steamer which can carry 2,000 passengers without crowding. The Island is laid out as one large park and with the many ponds which cover a large area, over which at many points are rustic foot bridges. Along the lake front where the blue waves of old Ontario roll in, dotted here and there among the trees, are the summer residences of the millionaire and the less pretentious home, but none the less happy, of those who, after a busy day in the city, return to their families and enjoy with them the delightful cool breezes of the evening, and are thereby enabled on the morrow, with renewed health and strength, to strive with their fellow men for the wherewithal which brings these luxuries. On the Island are situated the lovely summer quarters of the Royal Canadian Yacht Club, and I had pleasure in accepting an invitation of one of the members and being royally entertained. For an evening's enjoyment, Hanlan' Point (the former home of the great oarsman), is the place to go to. There is situated there a large hotel with billiard rooms, bowling alleys, merry-go-rounds, and roof gardens. There are also large athletic grounds, which are said to contain one of the fastest bicycle tracks in America.

After seeing the various sights and partaking of light refreshments, which for another name we will call coffee, we returned to our hotel feeling as fit as a fiddle for the work of our convention on the following

day. At the morning session we were welcomed by Ald. Scott on behalf of the Mayor and Corporation and citizens to the city, by Mr. E. Gurney, president of the Board of Trade, and also by Mr. W. J. Burroughes, president of the local Master Plumbers' Association, after which we adjourned to the grounds of the Metropolitan Church, where we were photographed. The business of the committee being concluded on Friday morning, on the kind invitation of Ald. Scott, chairman of the Reception Committee of the Council, accompanied by Ald. Beale, we were invited to a carriage drive to view the sights of the city. It took twenty carriages to contain the delegates accompanied by their lady friends.

Our first halt was made at the new municipal buildings, Mr. E. J. Lennox, architect. They are a credit to the city and to the architect who designed them, and will cost about \$2,000,000. I understand that the firm of our new president, Mr. Joseph Wright, of the Bennett & Wright Co., Limited, has the contract for the heating, ventilating, plumbing and electric wiring, amounting in the neighborhood of \$200,000, which is, no doubt, the largest contract of that class of work ever let in the Dominion of Canada. Passing by the Horticultural Gardens, with their artistically laid out walks and beautiful shrubbery. Proceeding along Queen street, up Jarvis street, Gerrard, Sherbourne and Bloor streets, over beautifully paved streets, lined on either side with maple and chestnut trees planted in the boulevards, with their well watered and carefully looked after lawns. From the many palatial residences peeping out among the trees we could see that they were in design and finish up-to-

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date. In our drive, as we proceeded, could also be seen the cosy home of the man of moderate means and the cottage of the mechanic, with his little garden plot planted with flowers. We drove through Queen's Park, visiting the noble pile known as the Parliament buildings, the home of the Ontario Legislature, with monuments erected to the memory of the late Sir John A. Macdonald and George Brown; also to those brave volunteers who fell in defence of their country at Ridgeway in 1866, and at Batoche. There are also there those classic buildings, the University of Toronto, which were destroyed by fire some seven or eight years ago, but which have since been rebuilt and are now up-to-date in every branch. After a drive to the extreme western part of the city we entered the gates of High Park, a large park containing nearly 200 acres, with beautiful drives in all parts of it. The large oak and maple trees with their wide spreading branches, afford to many picnic parties, who make use of the grounds, shade and coolness. A drive along the Humber Bay in a short line brought us to Dufferin street, and, at the kind invitation of the Toronto Radiator Co., we were invited to inspect their offices and works. At our entrance to their offices we were met with a streamer, "Welcome to the Master Plumbers' Association," in large letters, which attracted the eye of every visitor. On assembling in the show rooms Mr. Adam Taylor, who is acting manager in the absence of his brother, Mr. John Taylor, who is in Europe, extending on behalf of the president and Board of Directors an invitation to partake of refreshments. After our drive of three hours you may imagine that most of us were feeling rather fatigued, and, as the day was very hot, we required no second bidding, and in a very short time we filed into the Board room, where we were served with everything man could desire of the good things to eat and drink. President Lamarche, in proposing the health of the Toronto Radiator Co., said that they were all delighted with their reception, while "Safford" radiation and the com-

pany's entertaining could not be beat. The many delegates viewed the various departments of the works and were delighted with all they saw and of the information that was imparted to them as to the construction of the "Safford" radiator.

Continuing our drive we drove down Dufferin street to Exhibition Park, where the Great Victorian Era Exposition is to be held in September. We were shown the various buildings and also the conservatories, where the ladies of our party were presented with bouquets of roses. Through the kindness of Mr. Carrick, an inspection of the show rooms and shops of the Gurney Foundry Co., Limited, were made. We returned to our hotels and took a short rest before the banquet.

On assembling at Harry Webb's parlors about 8 o'clock, we were received in right royal style by the Entertainment Committee, and by a large number of the local master plumbers. The menu card was very prettily gotten up, and contained a complete list of the good things fit for a king with the toast list included. Mr. W. J. Burroughes, president of the Toronto Master Plumbers' Association, occupied the chair. The toast list having been completed, and it being the shady side of 2 o'clock, the chairman gave us all warning that the steamer left the dock at 7 o'clock sharp for Niagara Falls and we retired to get a few hours sleep, having spent an evening long to be remembered by all of us.

According to previous arrangements the delegates and their friends were in good time Saturday morning at Yonge street dock, although the banquet on the previous evening was more than some of the delegates could stand, and they were, therefore, left behind, but were able to take the steamer at 11 o'clock and were able to participate in the enjoyments provided for the day. The Chippewa soon had the delegates on board, and, after a very pleasant two hours' sail across Lake Ontario, old Niagara town was reached. After a short stay for the disembarking of a few passengers, we steamed up the beautiful Niagara River with its swift

running water and high banks, and landed at the historic town of Queenstown, memorable in the war of 1812. Electric cars were in waiting, and in a short time we were ascending the mountain side, from the top of which a magnificent view was presented to us of the country below: Niagara River wending its way to Lake Ontario, while on the other side could be seen the fruit farms which have made this district famous throughout the land. Brock's monument is presented to our view, erected on a high point, from which it is said that on a clear day the city of Toronto, 40 miles away, can be seen. The railway tracks are laid along the banks of the river, and here and there is presented to us a panoramic view of the rushing torrents. A short stop is made at the Whirlpool, and from the high banks, which rise to the height of 250 feet, can be seen the great whirling eddies in their mad endeavors to get away from the vortex. Continuing our course, we pass the Whirlpool Rapids, and in a short time we are past the town of Niagara Falls with the Cantilever and Suspension bridges crossing the river in close proximity. Entering Queen Victoria Park, the first good view of the Falls is presented. There have been written in the past the impressions of those who for the first time have gazed upon the great cataract, some being disappointed and others spellbound; as for myself, being of a practical turn of mind, I thought what a vast amount of power was going to waste that might be utilized in driving the wheels of industry. Again embarking on the electric cars we skirt the edge of those beautiful rapids above the falls in all their turbulent grandeur, passing on to the Dufferin Islands with their shady nooks and quiet retreats. On our return luncheon was served in the Dufferin Restaurant and it was very acceptable. Our new president, Mr. Joseph Wright, occupied the chair, and on his left Ex-President Lamarche, and on his right Mayor Cole of Niagara Falls, who, being a plumber himself, felt quite at home among his fellow craftsmen. Toasts were proposed and drunk with much enthusiasm, but, as

one of the speakers said, to be in a hall making a speech when so many points of interest were to be seen was to him infamous. A hasty adjournment was therefore made and the members of the Entertainment Committee formed themselves into little parties so as to be better enabled to show us all that was to be seen in the short time at our disposal. I was fortunate in being invited into the party of Mr. Adam Taylor of the Toronto Radiator Co. There were 26 under his guidance. Our first point of interest was the incline railway, which we descended to the bank of the river below from which point we embarked on the steamer Maid of the Mist. Mayor Cole, being of our party, introduced us to the captain, who, being in the past a plumber, did his best to make our stay with him as pleasant as possible, and for our benefit gave us what is not considered on the programme, a trip up to the very verge of the falling waters, where, with our oil-cloth suits to protect us from the mists, the water rolled from us as in a heavy shower. From the deck of the steamer the view to my mind was grand, and you can realize, from the vast amount of water that rushes from the height above, the manner in which our little ship was tossed about, and it was easy to contemplate that whatever might come within its awful reach was doomed to destruction.

Parted singing "Auld Lang Syne" with a "Happy to meet, sorry to part, happy to meet again."

REGISTRATION BILL.

FOR five years the Plumbers' Company, of London, England, have had before the British House of Commons a plumbers' registration bill which is intended to provide for the examination and certification of plumbers, but it is only lately that the measure has given rise to any discussion in the House. Some interest was aroused in regard to the proposals of the bill a couple of weeks ago, when it came up for its third reading.

It will be remembered that the opponents of the measure considered themselves duped when the bill passed its second reading at 11.30 o'clock one night when only forty-five members were present. They are now waging a bitter war against its passing the third reading, and a three-months' hoist was moved by General Laurie, from whose speech we are apprised of the principal objections there are to the bill's passage.

At present there are many societies and organizations in England who are attempting to educate plumbers both theoretically and practically, and to prohibit the untrained and unqualified plumbers from doing business. Should this proposed measure be put in force these Councils and Guilds, including the Technical Education Committees of thirty-two counties and county boroughs, will be deprived of considerable patronage; consequently they are using every possible means to prolong or prevent its passage. As late as May 25 last the City and Guilds of London Institute, which has been the great central institute for supervising technical training in the country, wrote to the Plumbers' Company, asking that they might

jointly consider the bill in order to arrive at some more satisfactory method of carrying out the proposals. The Plumbers' Company declined, however, to have an interview. It is claimed that since the institute began working in 1881 its interests should be seriously considered. "All these companies have been doing good work," Mr. Laurie said, "and were likely to give better satisfaction with the experience they were year by year gaining, so why should these bodies be superseded?"

It was also pointed out in the discussion that this measure should be based on sound and satisfactory lines, which, if need be, might be applicable to other trades, as this was the first proposal that had ever been made to register the names of a trade as distinguished from a profession.

Another serious objection to the measure is the idea in the minds of some people that the object of the framers of the bill is not to improve public health but rather to secure a monopoly for a city company. Recently the master plumber has suffered very much from the competition of the more scientific large builder. Master plumbers, as a rule, do not spread and embrace other businesses, but other businesses embrace theirs. Accordingly the small master plumbers need protection. But a member says if they received this protection, "it would create a class of workmen who would cram through the examination and rest content, not seeking to develop the trade further.

The supporters of the bill gave the usual arguments in support of such measures. The training and examination of plumbers is absolutely necessary for the security of public health. They claimed also that the evidence given before the Select Committee showed distinctly that there was no desire to create a monopoly, but that the Plumbers' Company was asked to deal with the subject because it was the most competent body. They claimed that the examinations of these Guilds, etc., were entirely useless, and that the workmen themselves did not consider a man an efficient plumber until he had passed the company's examination.

On a vote being taken, the supporters succeeded in having the bill taken up in detail despite the objection that it was entirely unworkable. Several of the clauses have already been passed.

Owing to the far advance of the session it is not likely that the bill will be passed before adjournment takes place.

PLUMBING NOTES.

John Borton & Co., plumbers, Halifax, have dissolved.

Harris & Hatfield, plumbers, Annapolis, N.S., are advertising their business for sale.

Bennett & Wright claim that they have the contract for the heating and ventilating of Victoria street school, Toronto.

J. W. Hughes, St. Antoine street, Montreal, has received the contract for the plumbing of the new C.P.R. station, Dalhousie square.

Worthington, Garratt & Armstrong report that they have contracts for the hot water heating of O'Neill's hotel at the corner of Queen and Parliament streets, Toronto, and of a dwelling on Elm avenue, Rosedale, for Mr. Mace.

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For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.



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BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

THERE has been an informal meeting called of local creditors of the John Eaton Co., Limited, Toronto.

James Skerry, general merchant, Albrerton, P.E.I., has assigned.

John J. Campbell, general storekeeper, Little Grace Bay, N.S., has assigned.

Cutler Bros., manufacturers of bicycles, Toronto, have assigned to Edwin Hill.

The mortgagee is in possession of the stock of bicycles of A. Speck, Nanaimo, B. C.

Therrien & Co., general merchants, St. Henri, Que., have assigned to Kent & Turcotte.

The New Barnes Cycle Co., Limited, Woodstock, has assigned to Edward W. Nesbitt.

Henry McDouall, hardware merchant, Yorkton, N.W.T., has assigned to J. H. Ashdown.

F. B. Latour, general merchant, St. Polycarpe, Que., has compromised at 30c. on the dollar.

G. B. Armstrong & Co., general merchants, Lower Nicola, B.C., are asking for an extension.

Rupert E. Sweet, general merchant, Country Harbor, N.S., is offering to compromise at 25 per cent.

Sanderson Percy & Co., wholesale dealers in paints and oils, etc., have compromised at 60c. on the dollar.

There will be a meeting of the creditors of J. H. Breadon, general storekeeper, Marbleton, Que., on the 19th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

Courteau & Frere, builders, Montreal, have dissolved.

Sisenwain & Leavitt, dealers in scrap iron, Montreal, have dissolved.

Desforges & Geoffrion, hardware merchants, Montreal, have dissolved.

The partnership of Konig & McCuaig, general merchants, Westville, N.S., has been dissolved.

Roderick Chrysler Carter is registered as sole proprietor of the St. Lawrence Portland Cement Co., Montreal.

Atkinson & Co., lumber merchants, Deloraine, Man., have dissolved partnership. W. H. Atkinson continues.

Joseph Gagnon and Hector Piquette have formed a partnership in Montreal to trade as painters under the style Gagnon & Piquette.

J. B. Louis and Xavier Gauthier have formed a partnership in Chicoutimi, Que., to do business in lumber under the style Gauthier & Frere.

John H. Bell, Wm. S. Bell, and Wm. Galbraith have formed a partnership in

Montreal to trade in coal under the style Bell Bros. & Co., Limited.

Wm. Stark and Robert Stark have formed a partnership in Montreal to carry on a wholesale hardware trade under the style Howden, Stark & Co.

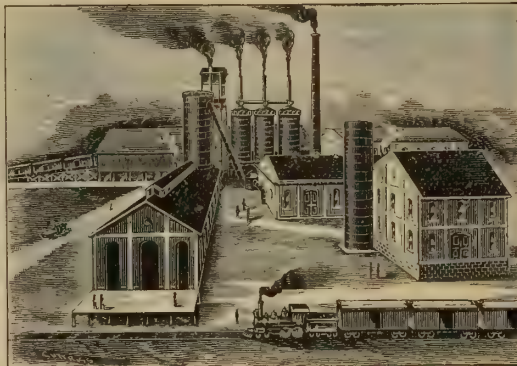
Meril Gingras and Arthur Decelles have formed a partnership in East Farnham, Que., to carry on a carriage manufacturing and blacksmithing trade under the style Gingras & Decelles.

The Firmite Concrete Pavement Co., Montreal, have dissolved partnership. A new partnership has been formed by Napoleon Massey and Joseph L. N. Chevrier to run under the old style.

SALES MADE AND PENDING.

John S. Trites, general merchant, Sussex, N.B., is selling out.

The stock of J. E. Plourde, general merchant, Cacouna, Que., has been sold at 58 1/2 c. on the dollar.



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Manufacturers of

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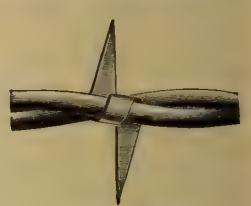
BEST GALVANIZED BARB WIRE



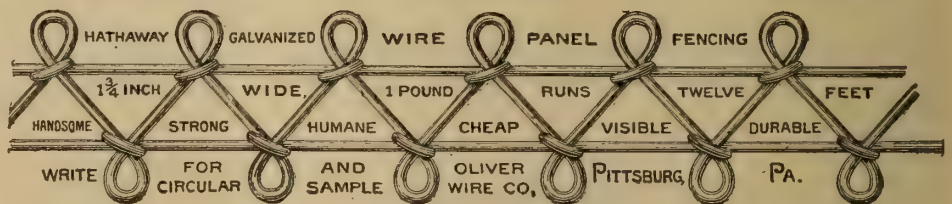
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Toronto, Ont.

Wm. Robertson, harness maker, Bathurst, N.B., has sold out and moved away.

Robert Sessions, manufacturer of trunks, Que., is advertising his business for sale.

The Beaver Line Co., Limited, Montreal, are about selling out to Peterson, Tate & Co.

John Perry, manufacturer of bricks, Nanaimo, B.C., is advertising his business for sale.

The general stock of Philomene Beupre, Gleichen, N.W.T., has been advertised for sale by auction on the 5th.

The stock of Richardson & Loree, general merchants, Carman, Man., has been sold at 70c. on the dollar.

CHANGES.

McDonald & Matheson, general merchants, Westville, N.S., are retiring from business.

Lowther & Co. are starting a general store in Russell, Man. They have bought out the stock of A. Biggins, Whitewood.

FIRES.

A. W. Freeland, general merchant, Edgington, Ont., has been burnt out. Partially insured.

DEATHS.

Anselme Laine, painter, Levis, Que., is dead.

Wm. Pike, coal dealer and cooper, Thorold, Ont., is dead.

A. J. Boyd, general storekeeper, Pennyfield, N.B., is dead.

Louis G. Gravel, of the hardware firm of Gravel & Freres, Montreal, is dead.

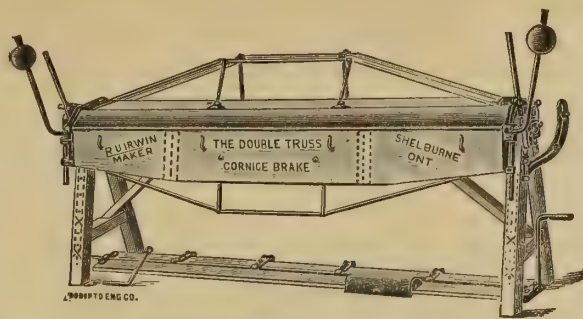
John Patterson, of Patterson & Foster, general merchants, Harbor Grace, Nfld, is dead.

Robert Brown, of R. Brown & Son, proprietors of a foundry in New Glasgow, is dead.

MENDING DEFECTIVE BRASS WORK.

A correspondent of Metal Worker wrote: Will you let me know if a small sand hole in a brass coupling can be calked up so as to render satisfactory service, and if not, please give the reason?

This was the answer given—The conditions under which the coupling is to be used should govern the advisability of any attempt to mend it. If it is new work the defective piece will be replaced by the manufacturer and the customer is entitled to have sound goods. A sand hole is hardly a definite description of the condition of a brass casting. Sometimes it may be simply a small hole clear through, while in other cases it may be a more or less spongy condition in a considerable portion of the piece, when any attempt to mend it will be unsuccessful. Sometimes a hole can be drilled in the piece and a copper rivet put in it, which will enable the piece to do as good work as if it were entirely sound. Again, if the sand hole is very small and the casting will be used under a light pressure, it is quite possible to stop the hole by forcing the metal surrounding the hole into it, either by means of a hammer or some blunt tool used to drive the metal up in a circle all around the hole.



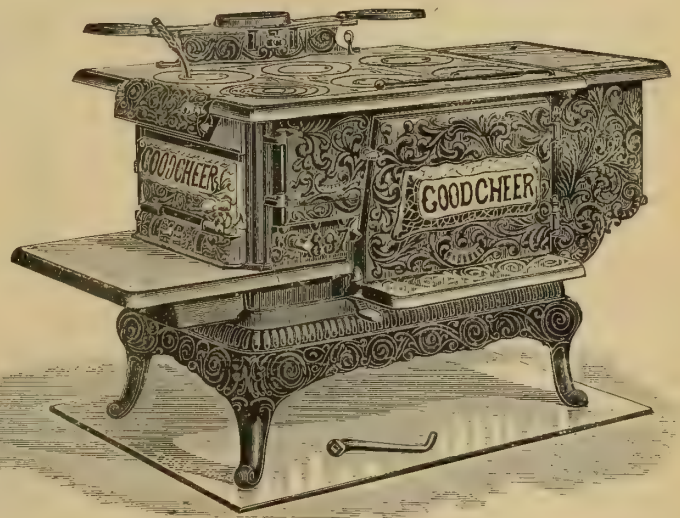
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

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Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



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All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

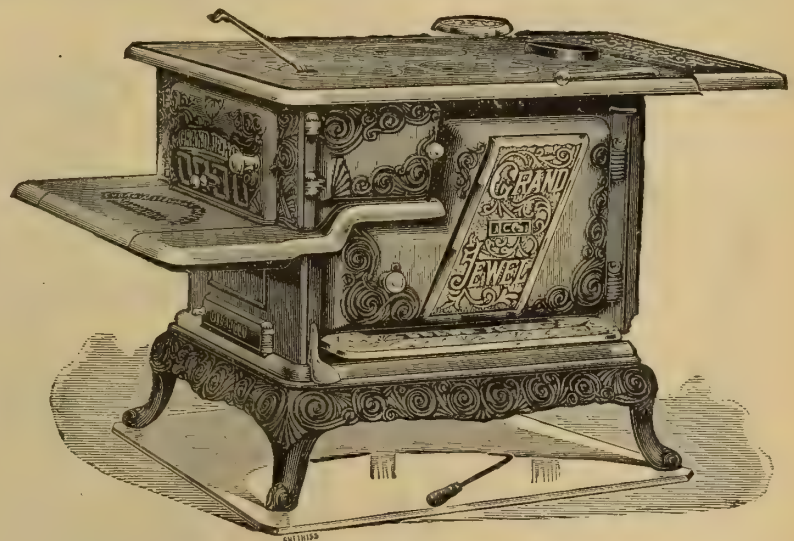
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With Patent One-piece Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son, MONTREAL

HOW WIRE NAILS ARE MADE.

A WIRE nail's preparation for the market was explained to a local reporter by one of the employees of a nail company, Cleveland, O. The newspaper man and the office employe spent the greater portion of one afternoon in the various departments of the works, for the purpose of following the billet of steel to the nail keg.

Several generations ago nailmakers worked before a small forge, and the product of their labor was what were known as wrought nails. Later an inventor made a machine which produced cut nails from strips of iron.

To-day all wire nails are made by machinery, and they roll from the machine in a volume that reminds one of threshed grain tumbling from a separator spout.

In the manufacture of a wire nail the first step is taken in the rod mill. Steel billets 4 inches square, about 30 inches in length, and weighing 150 lbs. each, are used. After the billets have been heated to the required temperature in the furnaces they are run through the rolls, and each is transformed into a steel wire one and a half miles in length.

As soon as the "bundles" of wire are cool they are taken to the acid room, where they are immersed in a chemical preparation, which cleanses them and removes the scales of steel. The wire, however, is not yet sufficiently smooth to make desirable nails, and it is transported on hand trucks to the wire-drawing department, where it is drawn through a die, which scrapes off all dust and leaves it as bright as silver and as smooth as velvet. After this preparatory work has been completed the wire is ready for the nail machines.

The nail machines resemble the old-fashioned feed cutters in use on farms in general appearance. On one side there is a heavy fly-wheel, which regulates the speed of the machine. On the opposite side is a reel on which the nail wire is placed.

Between the reel and the flywheel are a number of mechanical devices that combine extraordinary strength with intricacy. The wire passes through a die, where it is caught by clamps, which feed it into the machine. Another pair of automatic clamps hold the wire steady, while shears cut the wire the desired length.

Simultaneously with the movement of the shears a heavy horizontal trip hammer strikes a blow with such force that the end of the cold steel is flattened out to a round head, and at the same time another pair of shears nips the other end of the wire, thus making the point. The action of this machinery is so rapid that there seems to be only one continual blow struck by the trip

Emery and Hardware Specialties**COOKE HARDWARE CO.**

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

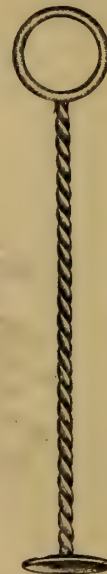
Manufacturers of

**Door Knobs, Japanned, Nickel, Silver and
Bronze Plated and Real Bronze.**
Sold by all Jobbers.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of

10 cents**HARDWARE AND METAL, Toronto****Bar Sundries***... in Electro Plate.***THE TORONTO SILVER PLATE CO., Limited**

Factories and Salesrooms

E. G. GOODERHAM,
Manager and Sec.-Treas.

Toronto, Canada.**THE PANSY WOOD COOK**

**Patent Reservoir Cook Stoves
Entirely New for 1897
Elegant in Design
Perfect in Construction
Moderate in Price**

COLD ROLLED STEEL OVEN

New
Catalog
Out
In
July



The D. MOORE CO. Limited Mfrs. of High-Class Stoves and Ranges, **Hamilton, Ont.**

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

hammer. The nail drops into a hopper, and is followed by others with such rapidity that the eye can scarcely distinguish it from its fellows.

The intricate machinery which makes the rapid manufacture of nails possible is carefully protected from dust, and only the most experienced nailmakers are permitted to repair it when it temporarily gets out of order.

The general principle of the machines which make the various sizes of wire nails is the same, the difference being in the size of the machine. One machine in the factory makes railroad spikes, putting on the head with a blow from a very heavy hammer. Another machine produces complete boat spikes 14 inches long with a single stroke of the hammer.

The preparation of nails for the market is an important branch of work. A close examination of a wire nail will disclose the fact that it is highly polished, this being the result of the last process of manufacture before the nails are placed in kegs and labeled. A large furnace stands in a room in the rear of the nail mill, and over it there has been erected a sort of revolving boiler, which is kept filled with a chemical compound.

The nails are placed in it, and the preparation gives them a polish of extraordinary brilliancy. They are then taken to another room, where they are weighed into kegs, and then start on another journey to the coopers, who put in the heads of the kegs. They are then ready for shipment.

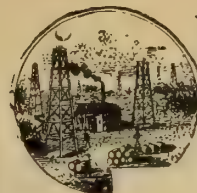
Nails and tacks are common articles, but it is only necessary to make a tour through a large nail mill to realize that mechanical ingenuity has been severely tested to make their economical manufacture possible.

THE FIRST IRON RAILS.

Mr. Randall, in his personal recollections, sets to rest a question which has often been debated as to where in England the first iron rails were laid down for the conveyance of carriages. It was, he declares emphatically, at Coalbrookdale. Sir Robert Stephenson, son of the famous Sir George, visited the works of the Coalbrookdale Iron Co. and verified the accuracy of the statement by an examination of the company's books. It is true that the invention owed all its significance to the subsequent discovery of Watt, but, as Mr. Randall contends, it is to Shropshire that the credit belongs of inventing the germ of the idea, from which grew the great railway system of the country.—Hardwareman.

"How much do these scales weigh?" he inquired of the new clerk.

"I—I don't know, sir," answered the clerk, "but if you will wait one minute I'll weigh them and tell you."—Cincinnati Enquirer,



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

**Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.**

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ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Ltd.

ADVERTISING DEPARTMENT

MONTREAL

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Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed
Nuts, Square and Hexagon



**BROOM AND CORDAGE
WORKS.**

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

**Iron, Wire and Brass
Work**

Address—

Toronto Fence and

Ornamental Iron Works

(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelities, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

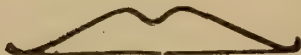
**A. B. JARDINE & CO.
HESPELER, ONT.**



WADE & BUTCHER,
SHEFFIELD, ENGLAND.



OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

JAMES HUTTON & CO., Agents, - - - Montreal

CURRENT MARKET QUOTATIONS.

TORONTO, July 16, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X., "	6 25	
I.X.X., "	7 50	
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	3 60
I.X.	4 50	4 60
I.X.X.	5 50	5 60
I.X.X.X.	6 50	6 60
D.C., 12½x17	3 50	3 75
D.X.	4 50	4 75
D.X.X.	5 75	6 00

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 15	
I.C., special sizes	3 25	
20x28.	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 25	6 50
I.X., Terne Tin		8 00
I.X., Orion		8 00

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs	Per lb.	
14x60, "	0 05½	0 06
14x65, "		

Tinned Sheets.		
72x30 up to 24 gauge	0 06	0 06
26 "	0 06½	
28 "	0 07¼	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined "	1 80	
Horse Shoe "	1 80	
Band "	2 25	
Hoop "	2 25	
Swedish "	4 00	4 25
Sleigh Shoe Steel "	2 50	
Tire Steel "	2 75	3 00
Machinery "	0 10	0 11
Cast Steel, per lb.	0 10½	0 14
Russian Sheet, per lb.	0 10½	0 11
Tank Plates, 1-5 and thicker.	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½-inch	0 06½	
2 "	0 07½	
2½ "	0 09¼	
3 "	0 11	

Steel Boiler Plate.

¾ inch	2 45	
	2 35	

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 35	
26 "	2 45	
28 "	2 55	

Canada Plates.

All dull, 52 sheets	2 50	
Half polished	2 50	2 60
All bright	3 00	3 25

Iron Pipe.

Wrought, ¼ to ¾ inch, \$1.87; ½ inch, \$2.10;		
¾ inch, \$2.45; 1 inch, \$3.40; 1¼ inch, \$4.50;		
1½ inch, \$5.87; 2 inch, \$7.87.		
Galvanized, ½ inch, 4c; ¾ inch, 4½c; 1 inch,		
6¾c; 1¼ inch, 10¼c; 1½ inch, 11½c.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 5 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
	Per lb.	
16 gauge	0 03¾	
18 to 20 gauge	0 03½	
24 gauge	0 03¼	
26 "	0 04	
28 "	3 75	0 04

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼ "		4 75
" 5-16 "		4 00
" ¾ "		3 75
" 7-16 "		3 25
" 1 "		3 25
" 9-16 "		2 95
" ¾ "		2 85
" ¾ "		2 75
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per		
doz. yards	0 13	0 50
Jack chain, double, per doz.		
yards	0 15	
Jack chain, brass, single, per		
doz. yards	0 20	10

Copper.

Ingot.		
English B. S., ton lots	0 11¼	0 12
Lake Superior		
Bolt or Bar.		
Cut lengths, round, ½ to ¾ in.	0 20	0 22
" round and square		
1 to 2 inches	0 18	0 19
NOTE.—Complete, lengths about 15 feet		
from 3 to 5 cents a pound.		

Sheet.

Untinned, 14 oz., and light, 16		
oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16		
oz., irregular sizes	0 15	0 16½
NOTE.—Extra for tinning, 2 cents per		
pound, and tinning and half planishing 3		
cents per pound.		
Planished and tinned, 14x48		
and 14x60	0 25	0 27

Braziers. (In sheets.)		
4x6 ft. 25 to 30 lbs. ea., per lb.	0 17	0 19
35 to 45 "	0 15½	0 16½
50 lb. and above, "	0 15	0 16
Boiler and T. K. Pitts.		
Plain Tinned, per lb	0 21	
Spun, per lb.	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12½ p. c. off list.		
From 20 gauge up, 12½ p. c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.		
off list.		
nests, hard-rolled, 2x4 ft.,	0 20	0 00

Zinc Spelter.

Foreign, per lb	0 04½	0 04¼
Domestic "	0 03¾	0 04

Zinc Sheet.

5 cwt. casks	0 05½	
Part casks	0 05½	

Lead.

Imported Pig, per lb	0 03½	0 03½
Domestic, per lb	0 02¾	0 02¾
Bar, 1 lb.	0 04½	0 04½
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04½
Sheets, 3 to 6 lbs., per sq. ft.,		
by roll.	0 04	0 04¼
NOTE.—Cut sheets ½ cent per lb. extra.		
Pipe, by the roll, usual weights per yard, lists		
at 7 cents per lb. and 30 per cent. discount.		
NOTE.—Cut lengths, net price, waste pipe,		
in 8-ft. lengths, lists at 7½ cents.		

Solder.

Bar half-and-half	0 11	0 11½
Standard	0 10½	0 11
Wire	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb.	0 08	0 08½

Anti-Friction Metal.

'Beaver' brand	\$0 20	
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White Lead.

Pure, Assoc. guarantee, ground in oil,		
25 lb. irons	5 15	
No. 1 do	4 77½	
No. 2 do	4 40	
No. 3 do	4 02	
No. 4 do	3 65	

Brandram's B. B. Genuine.	6 25	
" Decorative	5 85	
" No. 1	5 85	
" No. 2	4 65	
f.o.b. Halifax, St. John, Montreal, Toronto	6 50	
James' genuine	6 00	
No.	6 00	

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon.	1 00	
Second qualities, per gallon.	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe		
cwt	1 35	1 40
Yellow Ochre (J. F. L. S.), bbls.		
per cwt	2 75	
Yellow Ochre (Royal), per		
cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt.	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	
" Umber, "	0 10	
do. aw	0 09	
Drop Black, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure per lb.	0 12	
Golden Ochre	0 03¾	
Ultra marine Blue in 28-lb.		
boxes, per lb.	0 08	

Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks	0 13½	
50-100 lb. kegs	0 14	
25-lb. irons	0 14½	
1-lb. Boxes	0 15	

Sulphate of Copper.

Casks, for spraying, per lb.	0 04¾	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk "	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)		
No. 1 Furniture, per gal	0 65	
Extra "	0 90	
Brown Japan "	0 65	
Brown Japan, Turpentine, p.g	0 85	
No. 1 Carriage, per gal.	1 30	
And ex. No. 1 Carriage	1 60	
Gold Size Japan, per gal.	1 00	1 20
Pure Orange Shellac	1 85	2 20
Hard Oil Finish	1 20	
Oil Shellac	1 20	
White Shellac	2 25	

Linseed Oil.

Raw, per gal. net.	0 41	
Boiled, per gal. net.	0 44	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net.	0 41	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 08½	
Small lots	0 09	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
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Glue.

(In bbls.)		
Common	0 07¾	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatine	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
A1 clear		0 09
Liquid Glue—F. LePage's, discount 20 to 25		
per cent off list; Munn's, discount 25 to 30		
per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent.		
Amer.		
Central Fire Cartridges, pistol sizes, Dom.		
30 per cent.		
Central Fire Cartridges, Sporting and Military,		
Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer.,		
net list. B. B. Caps, discount 45 per cent.,		
Amer.		
Loaded and empty Shells, "Trap and"		
"Dominion" grades, 25 per cent. Rival		
and Nitro, 17 p. c.		
Shot.		
Canadian, common, 17½ per cent.		
Brass Shot Shells, 55 and 10 per cent		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.	
Best thick white felt wadding, in ½-lb bags.....	per lb 1 00	Annex, per doz.....	1 25 1 75	Canadian, dis. 25 per cent.		Nail	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	Mascott, ".....	1 35 1 85			Maydole's, dis. 5 to 10 per cent. Can., dis. 25 to 27½ per cent.	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	Erminie, ".....	1 12 1 20	Dies.		Tack.	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	Blind and Bed Staples.		Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		Magnetic, per doz.....	1 10 1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	sizes, per lb.....	0 7½ 0 12	Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		Sledge.	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	Bolts.		Door Springs.		Canadian, per lb.....	0 07½ 0 08½
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	Carriage, dis., 70 p. c. off new list		Torrey's Rod, per doz..... (15 p.c.)	2 00	Ball Peen.	
Thin card wads, in boxes of 1,000 each, 8 gauge.....		Tire, dis., 70 and 5 per cent.		Coil, per doz.....	0 88 1 60	English and Can., per lb.....	0 22 0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	Stove dis., 70 and 5 per cent.		English per doz.....	2 00 4 00	HANDLES.	
11 and smaller gauge.....	0 60	Elevator, dis., 35 to 40 per cent		Draw Knives.		Axe, per doz., net.....	50 2 00
9 and 10 gauges.....	0 70	Machine, dis., 70 p.c.		American, dis. 70 and 10 per cent.		Store door, per doz.....	1 00 1
7 and 8 gauges.....	0 90	Coach Screws, dis. 77½ p.c.		Canadian, dis. 25, 50 and 10 per cent.		Chest, per doz. pairs.....	0 40 2 50
5 and 6 gauges.....	1 10	Boring Machines.				Chisel.	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		Complete, with augers, each.....	5 00 7 50	Drills.		Firmer, per gross.....	3 00 4 50
11 and smaller gauge.....	1 15	Braces.		Hand and Breast.		Socket Firmer, per gross.....	3 25 8 00
9 and 10 gauges.....	1 40	Barber's.....	6 00 7 75	Millar Falls, per doz.....	16 00 51 50	Socket Framing, per gross.....	3 75 5 00
7 and 8 gauges.....	1 65	Barber's Ratchet.....	10 00 11 00	P. S. & W., dis. 40 per cent.		Fork.	
5 and 6 gauges.....	1 90	Farmers.....	2 00 2 75			C. & B., dis. 50 per cent. rev. list.	
Anvils.		Ilar's Falls.....	15 50 29 00	DRILL BIT.		Hoe.	
Per lb.....	0 10 0 12½	Brackets.		Morse, dis. 37½ to 40 per cent.		C. & B., dis. 50 per cent. rev. list.	
Anvil and Vice combined, each.....	4 50	Shelf.		Standard, dis. 47½ to 50 per cent.		Saw.	
Wilkinson & Co.'s Anvils..lb.	0 09 0 09½	Japanned Canadian, per doz.	0 50 3 40	ELBOWS.		American, per doz.....	1 00 1 25
Wilkinson & Co.'s Vices..lb.	0 09½ 0 10	pairs.....	0 85 3 20	Stovepipe.		Plane.	
Augers.		Berlin Bronze Canadian.....	0 85 3 20	Per doz.....	75 1 70	American, per gross.....	3 15 3 75
Gilmour's, discount 65 per cent.		Broilers.		FAWCETS.		Canadian, 35 per cent.	
Hollow Stearn's, per dozen.....	13 00 20 00	Light, dis., 65 to 67½ per cent.		Cork Lined, per doz.....	0 30 0 35	Cross-Cut Saw.	
Adjustable Stearn's, each.....	5 50 6 50	Reversible, dis., 65 to 67½ per cent.		Wine, per doz.....	1 30 3 25	Canadian, per pair.....	0 15 0 0
Post-hole, Vaughan's, each.....	1 35 1 60	Vegetable, per doz., dis. 37½ per cent.		Star,.....	2 80 3 90	HANGERS.	
Excelsior, Jennings', discount 50 per cent.		Henis, No. 8, ".....	6 00	Fenn's Corkstops, No. 2, per dozen.....	1 70	Door, 4 and 5 inch, per pair..	0 40
Awls.		Henis, No. 9, ".....	7 00	Petroleum, per doz.....	4 50 6 50	Lanes, 50 to 50 and 5 per cent.	
Sewing, per gross.....	0 65 1 59	Queen City ".....	7 50 10 00	FILES AND RASPS.		HATCHETS.	
Pegging, ".....	0 65 1 25	Butchers' Cleavers.		Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		Canadian, dis. 40 to 42½ per cent.	
Brad, ".....	0 85 1 60	From 8 to.....	4 23	Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		HINGES.	
" handled, per gross.....	3 60 30	Butts.		Black Diamond, 50 and 10 per cent. to 50 10, 5.		Blind, Parker's, dis. 60 and 10 to 65 per cent'	
Saddler's, per gross.....	0 45 1 60	Brass.		Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		" Shepard's Noiseless, dis. 60 per cent'	
Awl Hafts.		Wrought Brass, dis., 17½ p.c. revised list.		Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		" Buffalo, dis. 60 to 70 p. c.	
Patent Peg,.....	7 25 8 00	Cast Iron.		Heller's Horse Rasps, 50 per cent.		Light T and strap, 70 p.c.	
" Sewing, per gross.....		Loose Pin, dis. 70 per cent.		Jowitt's, English list, 25 to 27½ per cent.		Heavy, per lb.....	0 03½ 0 04½
Awl and Tool Sets.		Wrought Steel.		American, 60 to 60 and 5 per cent.		Screw hook and hinge—	
Millar's Falls, per doz.....	2 80 3 30	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		Great Western, 60 and 10 per cent.		6 to 12 in., per 100 lbs.....	3 15
AXES.		Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		FLUTING MACHINES.		14 in. up, per 100 lbs.....	Per doz. set.
Splitting Axes.....	5 25 5 50	Gen. Bronzed, per pair.....	0 40 0 65	Each.....	0 60 2 00	Screw, Eureka.....	1 13 1 80
Chopping Axes—		Can Openers.		Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.		Gate, Clark's.....	1 50 2 20
Black Prince.....	7 25 7 50	Acme, per gross.....	9 00 10 00	FORKS.		" Shepard's, dis. 50 to 60 per cent.	Per doz. pair.
Forest Clipper.....	7 25 7 50	Sardine Scissors, per doz.....	3 75 4 50	Gem, from \$1.25 to \$7 net.		Spring.....	1 00 3 50
Lance.....	8 50 9 00	Card.		FREEZERS		" Shepard's Samson.....	1 20
Mann's.....	8 00 8 25	Horse, per do.....	0 60 1 00	Ice Cream.		HOOKS.	
Maple Leaf.....	9 50 10 00	Carpet Stretchers.		Enterprise, dis. 10 per cent.		Cast Iron.	
Hand Made.....	7 50 7 75	American, per doz.....	1 00 50	Shepard's Queen City, dis. 15 per cent.		Bird Cage, per doz.....	0 50 1 10
Climax.....	8 00 8 25	Bullards, per doz.....	6 50	FRUIT PRESSES.		Clothes Line, per doz.....	0 27 0 63
Phantom.....	8 25 8 50	Carpet Sweepers.		Henis', per doz.....	3 25 3 50	Harness, per doz.....	0 72 0 88
Axle Grease.		Bissell, per doz.....	22 50	Enterprise, dis. 10 per cent.		Hat and Coat, per gross.....	1 00 3 00
Per gross.....	6 00 13 00	World, ".....	21 75	Shepard's Queen City, dis. 15 per cent.		Chandelier, per doz.....	0 50 1
Bath Tubs.		Daisy, ".....	24 00	FRY PANS.		Wrought Iron.	
Zinc, discount.....	3 90 4 0	Star, ".....	18 00	Acme, dis. 62½ to 65 per cent.		Wrought Hooks and Staples, Can., dis. 47½ per cent.	
Copper, discount, 40 and 10 p.c. off revised list		Crown Jewel, per doz.....	29 00	GAUGES.		Wire.	
Steel clad, 20 per cent. discount.		Grand Rapids, ".....	24 00 33 00	Marking, Mortise, Etc.		Hat and coat, dis. 60 to 60 and 10 p.c.	
Bells.		Cartridges.		Stanley's, dis. 50 to 55 per cent.		Belt, per 1,000.....	0 60 2 70
Hand.		(See Ammunition.)		WIRE GAUGES.		crew, bright, Eng., dis. 60 per cent.	
Nickel, 55 per cent.		Bed new list, dis. 55 to 57½ per cent.		Winn's, Nos. 26 to 33, each.....	1 65 2 40	HORSE NAILS.	
Door.		Plate, dis. 55 to 57½ per cent.		GLASS.		Canadian, dis. 50 p.c.	
Gon Sargent's.....	5 50 8	Cattle Leaders.		Window.		Canada Horse Nail Co.'s "C" brand f.o.b. Montreal, 50 p.c.	
" Peterboro, discount 50 per cent.		Nos. 31 and 32, per gross.....	8 50 9 50	Box Price.		HORSE SHOES.	
Cow.		Cement.		Double Diamond.		F.o.b. Toronto and Hamilton	3 35
American make, discount 66½ per cent.		Canadian, Portland.....	2 50	Per 50 ft.	1 20	Steel, ".....	4 85 5
Canadian, discount 45 and 50 per cent.		English.....	2 75	Per 100 ft.	2 30	F.o.b. Montreal 10c. less, and London more than above.	
Farm.		Belgium.....	2 50	Per 50 ft.	2 20	ICE PICKS.	
American, each.....	1 25 3 00	Canadian hydraulic.....	1 10	Per 100 ft.	3 85	Star per doz.....	3 00 3 25
House.		Figures are for carload lots.		GLASS.		KETTLES.	
American, per lb.....	0 35 0 40	Chalk.		Wire Gauges.		Brass spun, 7½ p.c. dis. off new list.	
Bellows.		Carpenters' Colored, per gross.....	0 45 0 75	Stanley's, dis. 50 to 55 per cent.		Copper, per lb.....	0 30 35
Hand, per doz.....	3 35 4 75	White lump, per cwt.....	0 60 0 65	GLASS.		American, 60 and 10 to 65 and 5 p.c.	
Moulders, per doz.....	7 50 10 00	Red.....	0 05 0 06	Window.		KEYS.	
Blacksmiths', discount 60 per cent.		Crayon, per gross.....	0 14 0 18	Box Price.		Lock, Can., dis. 50 p.c.	
Belting.		Chisels.		Double Diamond.		abinet, trunk, and padlock,	
Extra, 40 and 10 per cent.		Socket, Framing and Firmer.		Per 50 ft.	1 20	Am. per gross.....	1 60
No. 1. leather, discount 60 per cent.		American, dis. 75 to 77½ per cent.		Per 100 ft.	2 30	KNOBES.	
Standard, 55 per cent.		Canadian, dis. 50 and 10 per cent.		Per 50 ft.	2 20	Door, japanned and N.P., pe	
Agricultural, 65 and 10 to 70 p.c.		Tanged firmer, per doz.....	0 85 4 00	Per 100 ft.	3 85	doz.....	0 85 3 00
Bench Stops.		Churns.		Per 100 ft.	4 35	Bronze, Berlin, per doz.....	2 75 3 25
Per doz.....	5 00 6 00	Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		Per 100 ft.	4 85	Bronze Gem, ".....	6 00 9 00
Bits.		Steel, net.....	3 00	Per 100 ft.	5 60	Sava, ".....	8 75 10 00
Auger.		Clamps.		Per 100 ft.	6 35	Shutter, porcelain, F. & L.	
Gilmour's, discount 65 and 5 per cent.		Judds', dis. 20 per cent.		Per 100 ft.	6 35	screw, per gross.....	1 30
Excelsior, discount 60 per cent.		stearn's, per doz.....	10 00	GLUE POTS.		GRINDSTONE FIXTURES.	
Rockford Common, 65 to 65 and 5 per cent.		Clips.		Tinned, each.....	0 30	P. S. & W., per doz.....	3 30 4 00
" Perfection, 50 and 10 per cent.		Axle dis. 65 per cent.		Enamelled each.....	0 55		
Jennings' Gen., net list to 5 p. c. discount.		Coffee Mills.					
Car.		Bo.....	3 60 13 00				
Gilmour's, 47½ to 50 per cent.		Side.....	3 60 4 00				
Expansive.		Enterprise, No. 0.....	1 35				
Clark's, per cent.		No. 2.....	70				
Excelsior, 10 per cent.		Compasses, Dividers, Etc.					
Gimlet.		American, dis. 62½ to 65 percent					
Clark's, per doz.....	0 65 0 90						
Diamond, Shell, per doz.....	1 00 1 50						
Nail and Spike per gross.....	2 25 5 20						

KNIVES.		Wood, fancy Canadian or American, 37½ to 40 per cent.		Gurney Scales, 50 p.c.		Leather carpet tacks 65	
Claus, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.		Bailey's (Stan. R. & L. Co.), 50 per cent.		B. S. & M. Scales, 50 p.c.		Trunk nails, black and tinned 70	
Christie, \$7.00 net.		Miscellaneous, dis. 25 per cent.		Champion 60 per cent		Clout nails 66½	
Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.		Bailey's Victor, 25 per cent.				Cigar box nails 45	
Lightning, per doz. 6 50						Lining nails in papers 10	
Heath's, 52½ p.c.						" " solid heads, in bulk 60	
LADLES.		PLANE IRONS.		SCRAPERS.		Saddle nails in papers 10	
Melting, per doz. 1 70		English, per doz. 2 00		Box, per doz. 2 10		" " in bulk 15	
		Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.		oot, " 0 40		Tinned capped trunk nails 15	
LEMON SQUEEZERS.		PLIERS AND NIPPERS.		SCREENS.		Double pointed tacks, discount 90 and 25 p.c.	
Porcelain lined, per doz. 2 20		Button's Imitation, per doz. 5 00		Window, patent, per doz. 2 20			
Galvanized, " 1 87		German, per doz. 0 60		Door, per doz. 7 10			
King, wood, " 2 75				SCREW DRIVERS.			
glass, " 4 00		PLUMBS AND LEVELS.		Sargent's per doz. 0 65		4 00	
A glass 1 20		R. & L. Co., dis. 70 and 5 p.c.		SCREWS.			
LINES.		POPPERS.		Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.			
Fish, per gross 1 05		Corn, square, per doz. 1 35		Wood, R. H., " dis. 80 and 10 p.c.			
Chalk, " 1 90		Per doz 4 00		" F. H., brass, dis. 82½ and 10 p.c.			
LOCKS.		PRUNING SHEARS.		" R. H., " dis. 75 and 10 p.c.			
Canadian, dis. 50 p.c.		Hothouse, per doz. 0 55		Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.			
Russell & Erwin, per doz. 1 75		Axle 0 22		Bench, wood, per doz. 3 25			
Cabinet, " 1 20		Screw 0 27		iron, " 4 25		5 75	
Eagle, dis. 27½ to p.c.		Awning, " 0 35		SCYTHES.			
Padlock, " 0 50		PUMPS.		Discount, 60 and 10 p.c. revised list.			
English and Am., per doz. 0 50		Rumsey or Canadian cistern, 60 p.c.		SCYTHE SNATHS.			
Scandinavian, " 1 00		Pitcher spout, 70 to 70 and 5 p.c.		Canadian, dis. 40 to 45 p.c.			
Eagle, dis. 15 to 17½ p.c.		Canadian cistern, 60 p.c.					
MACHINE SCREWS.		Canadian pitcher spout, 70 to 70 and 5 p.c.					
Iron and Brass.		PUNCHES.					
Flat head, discount 25 p.c.		Saddlers', per doz. 1 00					
Round Head, discount 20 p.c.		Conductors', " 9 00					
MAGNOLIA METAL, ETC.		Tinners' solid, per set. 0 00		SHEARS.			
Magnolia Anti-Friction Metal, per lb. 25		" hollow, per inch. 0 00		B. & W., Japanned, dis. 75 p.c.			
No Name Metal, " 18		PUTTY.		B. & W., N.P., dis. 65 p.c.			
Mystic Metal, " 08		Bladder, per lb 1 75		Seymour, dis. 75 to 75 and 10 p.c.			
F. O. B. New York or Chicago.		Tins, lbs. 2 50		Etna, dis. 75 to 75 and 10 p.c.			
MALLET.		RAIL.		Heinisch, dis. 60 p.c.			
Tinsmiths', per doz. 1 25		Barn door, per foot. 0 02½		Bristol, Japanned, 80 p.c.			
Carpenters', hickory, per doz. 1 25		Sliding door, " 0 03½		" N.P., dis. 70 p.c.			
Lignum Vitae, per doz. 3 85		Lanes, " 0 02½		Claus, full nickel, 60 p.c.			
Caulking, each 1 60		RAKES.		" Japanned handles, 67½ p.c. off.			
MATTOCKS.		Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.		Seymour or Heinisch tailor shears, 15 p.c.			
Canadian, per doz. 8 50		Wood, 25 per cent.		SHEAVES.			
American, 60 and 10 p.c. off list.		RAZORS.		Sliding door, per set. 0 77		1 40	
MEAT CUTTERS.		Geo. Butler & Co.'s, per doz. 8 00		SHOVELS AND SPADES.			
Enterprise, American, dis. 30 to 32½ p.c.		Boker's, " 7 50		Canadian, dis. 45 p.c.			
German, 15 per cent.		Wade & Butcher's, " 3 60		SIEVES.			
MINING KNIVES.		Arbenz's, " 9 00		Wood rim, black, per doz. 1 05		1 10	
American, per doz. 0 42		Theile & Quack's, " 7 00		" tinned, " 1 25		1 35	
MOLASSES GATES.		RAZOR STROPS.		Tin rim, per doz. 2 30		2 45	
Stebbin's Patent, dis. per cent., 77½ per cent		Currier's, per doz. 1 25		" black, " 1 8		2 25	
NAILES.		RIVETS AND BURRS.		SNAPS.			
Cut Nails (Iron). Basis—50 to 60 dy. \$1.95 f.o.b., Toronto, Montreal, Hamilton, London.		4 mos. or 3 per cent. cash 30 days		Harness, German, dis. 35 to 37½ p.c.			
Cut Nails (Steel). Add 10c. to the prices in list for iron nails. 10-kg lots freight paid to maximum of 25c. per 100 lbs.		Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.		Acme 3 00		5 00	
Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburgh is in less than carload lots does not exceed 2½c.; other places where rate is higher, excess is added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kg or more.		Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.		Lock, Andrews' 4 50		11 50	
Brads and moulding nails, 80 p.c. from new list.		Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.		SOLDERING IRONS.			
NAIL PULLERS.		Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.		Per lb 0 00		0 24	
German and American 1 85		Black M. Rivets (Norway Iron) 60 p.c.		WROUGHT SPIKES.			
Square, round, and octagon, per gross 3 38		Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. in ½-lb. boxes and cartoons, 1c. per lb. extra, net.		Discount, 30 to 35 per cent.			
Diamond 12 00		Burrs, iron or steel, 55 and 5 per cent.		SPOKE SHAVES.			
NETTING.		Terms, 4 mos. or 3 per cent. cash 30 days.		Wood, English 1 8		5 00	
Poultry, 67½ per cent.		RIVET SETS.		Iron, American 1 35		2 35	
OIL.		Canadian, dis. 35 to 37½ per cent.		SPOONS AND FORKS.			
Canada refined oil (Toronto) 0 16		ROPE.		Tea spoons, per gross 7 50		12 00	
Carbon safety " 0 18		7-16 in. and larger, per lb. 5½ 00		Dessert, " 21 00		00 00	
Canada w. w. " 0 18		¾ in. 5½ 00		Table, " 30 00		30 00	
American w. w. " 0 00		½ and 5-16 in. 6½ 00		Dessert Forks, " 24 00		00 00	
Pratt's Astial. 0 00		Cotton 15 17		Medium " 27 00		00 00	
OILERS.		Russia Deep Sea 00 13		Table " 36 00		00 00	
McClary's galvan. iron oil can, with pump, per doz. 0 00		Jute 6½ 7½		SQUARES.			
Zinc and tin, dis. 50, 50 and 10.		RULES.		Iron, per doz. 1 65		2 90	
Copper, per doz. 1 25		Boxwood, dis. 80 and 5 to 10 p.c.		Steel, dis. 70 per cent, revised list.			
Brass, 1 50		Ivory, dis. 37½ to 40 p.c.		Try and bevel, dis. 50 to 52½ p.c.			
Malleable, dis. 25 per cent.		SAD IRONS.		STAPLES.			
PAISL.		Mrs. Potts, per set. 0 60		Fence, galvanized 00 2½		00 25½	
Galvanized, per doz. 2 25		" N.P., per set. 90		Wrought iron, dis. 80 to 82½ p.c.			
PENCILS.		SAD HEATERS.		STOCKS AND DIES.			
Dixon's, per gross 1 00		Dome, Shepard's, per doz. 4 75		American, dis. 25 p.c.			
" Carpenter 2 25		SAND AND EMERY PAPER.		STONE.			
PICKS.		B. & A. sand, 40 and 5 to 45 per cent.		Washita, per lb. 0 28		0 60	
Per doz 6 00		Emery, per quire. 0 55		Hindustan, " 0 06		0 07	
PICTURE NAILES.		SASH CORD.		" slips, per lb. 0 09		0 09	
Porcelain head, per gross 1 65		Per lb. 0 22		Labrador, " 0 00		0 13	
Brass head, " 0 40		SASH LOCKS.		" Axe, " 0 00		0 15	
PIPE CUTTING MACHINERY		Triumph and Morris, dis. 37½, 40 per cent.		" Arkansas, " 0 00		1 50	
Forbes Patent Die Stocks.—Curtis & Curtis, Mrs., Bridgeport, Conn.		Kempshell's, dis. 40, 62½ per cent.		" Water-of-Ayr, " 0 00		0 10	
No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00		Canadian, dis. 45, 50 per cent.		Scythe, per gross. 3 50		5 00	
No. 38 Hand Machine, range 1½ to 4. 100 00		SASH WEIGHTS.		Grind, per ton. 15 00		18 00	
No. 56 Hand Machine, range 2½ to 6. 175 00		Sectional, per 100 lbs. 1 40		TACKS, BRADS, ETC.			
PLANES.		Solid, " 1 25		Cheese-box tacks, blue, 80 p.c.			
Wood, bench, Canadian dis. 55 per cent., American dis. 55.		SAWS.		Trunk tacks, black, 80 p.c.			
		Crosscut, McMillan & Haynes, per dozen 0 40		" tinned, 80 p.c.			
		" Empire," McMillan & Haynes, per ft. 0 00		B.B.E. iron carpet, blued 80			
		" S. & D., Disston's, dis. 12½ to 15 p.c.		" B.B.E. iron carpet, bright or blued (in kegs) 40			
		Crosscut, Disston's, per ft. 0 35		" B.B.E. iron carpet, tinned (in kegs) 45			
		S. & D., dis. 35 p.c. on Nos. 2 and 3.		" B.B.E. cut tacks (in bulk), 75 and 10 ½ weights 40			
		Hack, complete, each. 0 75		Swedes, cut tacks, genuine, blued and tinned, 75 and 10 80			
		frame only. 0 00		Swedes, unholsterers' 80			
		SAW SETS.		Swedes, carpet, blued and tinned 70			
		" Lincoln," McMillan & Haynes, per doz. 0 00		" lace 50			
		Whiting, " 6 87		" brush 50			
				" gimp, blued, tinned & japan'd 75			
				Zinc tacks. 35			
				Copper tacks 62½			

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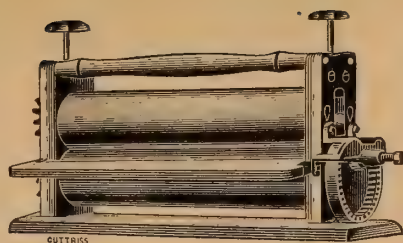
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No. 30



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The Slick Oil Can

PATENTED 1896.

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A Lantern or Lamp can be filled in the dark easier than by the ordinary Can, as it is impossible to overflow.

**NO OIL SPILLED
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The pump is attached in the simplest and strongest manner possible. . . .

Will not get out of order with ordinary use.
A Strong, Perfect Can, at a Low Price.



KEMP MANUFACTURING CO.

Toronto

HARDWARE AND METAL

Vol. IX.

MONTREAL AND TORONTO, JULY 24, 1897

No. 30

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A RECORD-MAKING TRADE YEAR.

THE official figures giving the foreign trade of the Dominion for the fiscal year ending 30th of June last are not yet to hand, nor are they likely to be for some months to come, but enough is known to establish reasons for gratification in regard thereto.

In regard to both the exports and the aggregate trade, based on exports and imports for home consumption, records have been won.

The aggregate trade is, in round numbers, \$244,000,000. This is about \$13,000,000, or over 5 per cent., larger than in 1896. Compared with any previous year, the advantage in favor of 1897 is about \$4,000,000.

It is, however, from the exports that the most gratification is obtained. These are, approximately, over \$133,500,000, which is nearly \$12,000,000, or about 10 per cent., in excess of last year. And 1896, it will be remembered, was a record-breaking year in this respect.

Our imports were not so gratifying as the other phases of our foreign trade just noted. But they, nevertheless, were by no means unsatisfactory. They aggregated \$111,-

231,000, which is over \$600,000 larger than the imports of 1896. Were it not for the revision of the tariff the increase would, no doubt, have been much larger.

Besides the records which the above figures establish, they declare what is still more gratifying: They declare that an un-mistaken revival of trade is being experienced in Canada.

But these are not the only evidences of this fact. The railway earnings, the clearing house returns, the movement of merchandise, the improvement of payments, all indicate the same thing.

The fact of the matter is, trade for some time has been a great deal better than most people were ready to acknowledge it was.

Trade in Canada, as well as that in the United States, is passing through new economical conditions. In conforming ourselves to these conditions inconvenience rather than pleasure is induced. And instead of recognizing what these influences really are, we conclude they are the bag and baggage of Hard Times, when in reality they are the forerunner of Better Times.

For instance, the day when long credits ruled is gone. The day of buying in large quantities is following it. This is a natural corollary. Long credits and large buying are the Siamese twins of the old business regime, and the departure of the one naturally means the exit of the other. But while people who sell willingly allow the one to go, the other a good many of them mourn over because they cannot retain.

Canada's foreign trade for 1897 is certainly a matter for congratulation, and while pleasing to us at the moment should

stimulate us to greater energy for the future.

Canada is a goodly country, but the development of its resources depends upon the measure of energy and enterprise exhibited by her citizens.

Uncle Sam seems determined that the pelagic sealing question shall not yet wear the seal of a forgotten past.

WROUGHT IRON PIPE DEARER.

THE wrought iron pipe situation has been a decidedly unsettled one during the current spring and summer, and although jobbers nominally did not make any alteration in their selling price it was not secret that they were not only buying for considerably less money than their asking price was equivalent to, but were selling for less. In fact, there was no regular basis, each jobber being a judge unto himself of what the market price was. Within the last week or so the labor troubles in the States were instrumental in causing a steadier market here. This was evidenced last week when Canadian makers withdrew all quotations on pipe. This possibility of higher prices has created more demand for pipe from the jobbing houses, and some large contracts were put through recently. Some houses were shrewd enough to get their orders in early, and, as a result, they will get their supplies about 5c. cheaper than others. One buyer who had closed a contract for 5,000 feet of $\frac{1}{4}$ -inch pipe at \$1.60 before prices were withdrawn tried to duplicate his order for a similar quantity but was asked \$1.65 to \$1.70.

CANADA'S NEW GOLD FIELDS.

THE reports which have come down to civilization regarding the extraordinary richness of the gold deposits on the Klondike and other rivers in the Yukon country have re-awakened interest in the yellow metal in Canada.

The interest in the Kootenay district, which a year ago was so demonstrative, is now rather passive. This is not due to an absence of paying gold, but chiefly to the absence of railway facilities and cheap fuel for the smelters. With the building of the Crow's Nest Pass railway and the creation thereby of much cheaper fuel for the smelters, there will necessarily be a revival of mining operations in the Rossland and other mining centres in that part of the country.

In the Rainy River district in Northern Ontario a lively interest is still being taken in gold mining. The ore there being of the free-milling kind, the cost of fuel is not necessarily much of a factor.

But whatever may be the condition of affairs in regard to other mining centres in Canada, one thing is certain, for the time being at least, the gold fields on the Klondike transcend all others. And in the Pacific states of the American Union the gold fever on account thereof is several degrees higher than it is in Canada.

That so many are turning their footsteps towards this new Eldorado, and a still greater number would like to do so, is not surprising. The amassing in a few months of what is to most people a handsome fortune is enough to enchant the most matter-of-fact of individuals.

And then look how easy it appears. There is no quartz to crush or smelt. No rock to be blasted. All that is wanted is a pick and shovel and a pan, equipped with which the miner can grovel in the river bottom and wash the sand from the gold dust and nuggets which the streams have for centuries been gathering from the mountain fastnesses and depositing in the valleys beneath.

A "tenderfoot" has about equal chances with an expert miner in amassing a fortune at placer mining. Hence discoveries like those in the Yukon are always sure to attract people of all sorts and conditions.

As to whether the richness of the Yukon country in gold has been exaggerated or

not remains to be seen. That there is a great deal of gold there is obvious, and we have not to depend alone upon the testimony of the enthusiasts who have returned from there laden with the precious metal for proof.

The report of Mr. Ogilvy, of the Dominion Geological Survey, who has spent some time in the district, is decidedly sanguine in regard to its gold mining possibilities. He states that when reports of the rich discoveries on the Klondike got abroad the claims on some of the other rivers in the Yukon district were abandoned. Mr. Ogilvy also cites discoveries of gold on the Pelby, Hootalique and other rivers in that part of the Dominion.

Gold has for a number of years been taken from the river bottoms in Northwest Territories and British Columbia. In 1895 300 men were employed on the Saskatchewan washing gold. And the Geological Survey report of that year stated that gold was to be found, "in greater or less abundance on portions of all the rivers east of the Rocky Mountains from the 49th parallel northward."

The way people are falling over each other in trying to get into this new Eldorado of Canada, another year or two is likely to see a comparatively large population there. Mr. Ogilvy, in the report just quoted, estimates that in two years it will be at least ten thousand.

A great many of these will be workmen and from the United States, and the greatest benefit is therefore likely to accrue to foreigners. Placed on the Statute Book at the last session of Parliament was what is commonly termed an alien labor law; it is to become operative upon an order-in-council being passed.

This law should now be put into operation in that part of the Yukon district which lies within the borders of the Dominion. It is a distasteful thing to do, but, in view of the severe manner in which the alien labor law in the United States has been enforced against Canadians, we can scarcely do otherwise if we are just to ourselves. Then an efficient Customs force should also be placed there to protect the interests of Canadian merchants, especially those at Victoria, Vancouver and New Westminster.

What effect this new field will have upon

the development of the gold mines in southern British Columbia and in Ontario remains to be seen. One thing seems quite certain, for the time being at least: the Klondike district will be the attraction for small investors; but this will not prevent men of large capital from either investing there or developing the properties they already possess in the older districts.

The man whose ideal is the dollar will never get above it.

COAL STRIKE AND CANADIAN IRON PRICES.

THE possible effect of the strike of the soft coal miners in the United States on the Canadian iron market is receiving considerable attention in Montreal and the east generally at present. Previous troubles in the coal and coke regions of the United States were a temporary benefit of considerable moment to the Nova Scotia iron furnaces, and if the present troubles are not settled they also are likely to have the same effect. The Canadian sea coast furnaces are independent of any outside source for their supplies of coke and similar material. They have them close at hand alongside of their plant in Nova Scotia. The blast furnaces in Ontario are not so advantageously situated. They draw their supplies of coke largely from Connellsville, and it is unquestionable, unless they have a good supply on hand, that any lengthy period of trouble in the mining regions in the States would enhance the cost of production to them. They, of course, have the recourse open to them of procuring their coke in Nova Scotia, but this would mean a largely increased cost of transportation. It seems likely, therefore, that in the event of the miners staying out any length of time it will tend to an increased consumption of Nova Scotia iron. As yet values on pig iron in Montreal have given no distinct indication of a higher tendency, sales of Hamilton having been made very recently at \$15 to \$15.25 for No. 1 laid down. Last week, however, higher prices were asked in the west, and it is doubtful if specifications this week at Montreal would be filled at the figure that prevailed last. In fact, sellers have already talked of an advance of 25 to 50c. per ton, but at this writing no advance has actually been realized. No. 1 Nova Scotia iron was offering last week at \$15.

CUTTING PRICES IN HARDWARE.

RETAIL hardware merchants in Toronto are complaining a great deal regarding the cutting of prices. And the greatest sinners, it is claimed, are not the departmental stores, but their own confreres.

The term price-cutting is an arbitrary one. Merchants who can buy cheaper can also, as a rule, sell cheaper. Because A sells a certain spade at a lower figure than B, it does not necessarily follow that he is cutting prices, for it is quite possible that he is earning at least as good a profit on the article in question as his competitor. Before a merchant is charged with cutting prices it would be well, in at least some instances, to consider whether or no he is sacrificing his profits.

Cutting prices is really to sacrifice profits.

Because there are some people who cannot buy right it would be folly to ask those to cut their cloth by the measure of those who cannot, through a variety of circumstances, buy right.

As to the complaint of the Toronto hardwaremen regarding the cutting of prices there is unquestionably "something in it."

Cutting prices is a foolish practice. It injures him who cuts as well as him whose business it is designed to destroy.

If the cutting of prices were something which only one could engage in at a time there might be some reason in it. But it is not. The limitation is governed by the number of merchants who are competitors in the particular line or lines affected.

When a merchant makes a cut in the price of a certain article to-day, his competitor will, just as sure as the sun rises, make a similar cut on the morrow. And then where will they be? Like the Croydon publicans, narrated by Ruskin, who put up useless iron railings, "both are, as to their relative attractiveness to customers of taste, just where they were before." And, like the publicans, too, they will be money out of pocket.

Cutting prices is, as a rule, the fruit of business jealousy. Jealousy, in turn, is the offspring of ignorance. Not ignorance in the generally accepted sense, but that which comes through a lack of social intercourse between two or more merchants.

There is nothing like a good business

men's association to create good will and dissipate price-cutting and kindred evils. Why Toronto retail hardwaremen have not long ere this had one is passingly strange. That there should be one is beyond question. The reason that such an organization has not an existence is not that the need is not felt, but that the apathy is too pronounced.

It is full time that the activity for a retail hardware dealers' association became pronounced.

This hot weather may put color on the peach but it will put pallor on the cheek of the merchant who refuses to take a needed rest.

WINDOW GLASS ADVANCED.

Cables received in Montreal this week from Belgium quoted the glass market firm and four points higher. Dealers locally have until the present shown no disposition to follow the rise abroad, but this recent advance has had the effect of causing advance in the jobbing price in Montreal, which has been marked up 5c. on first break and 10c. on each additional break.



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KEEPING TRACK OF QUOTATIONS TO CUSTOMERS.

WE have received several replies to the following enquiry of a New England house in *The Iron Age*, July 1, with reference to methods of recording prices quoted to their customers:

We should like to get from some of the large dealers their views or ideas in regard to keeping a record of prices and of their methods of pricing goods sold to monthly or credit customers. For instance, we do both a wholesale and retail business and handle a great many different kinds of goods, and many of our customers, being large factories and contractors, are entitled to better prices than our ordinary retail trade, and most of these people have bills sent in monthly. It has always been a source of considerable annoyance to us pricing all goods uniformly and keeping a record of prices given when they are sold by a good many different men and many of the salesmen not being authorized to make them a lower price or a price which they are entitled to. We should like to draw out the trade in this matter, which we regard with a great deal of interest.

We give below the substance of the advices thus received, which, it will be observed, contain many practical suggestions and will doubtless be of service to those who are looking for information in regard to this matter. The subject is, however, an important one and we invite further advices from the trade:

CLASSIFICATION AND INDEX BOOK RECOMMENDED BY A HOUSE IN MAINE.

All well regulated houses should have their customers classed in three or four grades, something as follows: Those who are prompt cash and large buyers are classed as, say, F, and get very lowest prices.

Those who are not so prompt, but still buy in quite large quantities, with undoubted credit, G, which means close prices, but a little more profit. Then small buyers, but good credit, H. For those customers of rather doubtful credit whom you have to insure, VH, and are priced accordingly.

Even with these distinctions and grades sometimes special quotations are made, and an index book should be kept showing under the customer's name any special figures given on enquiry.

These four grades of prices are kept in a cost book and are a guide to the one who has charge of sales, the salesman and the credit man. Every account on our books is rated something as stated above, and we have very little difficulty in satisfying our customers.

Of course, these ratings are constantly being revised, but we find this comes very easily and does not make any trouble.

There are many little guides that we have which would be hard to explain on paper,

but they come naturally to the head of this department. The man making prices for any house should have a good memory, as no system can be devised that is not conditioned on this requisite.

I trust I have made plain to you our system, which to us seems very simple and easily understood. We hope it may be of some benefit to your readers.

SYSTEM USED BY A LEADING ALABAMA HOUSE.

When we make a quotation to a customer we make a carbon copy of the letter that contains said quotation, and we have an index file and file same under the letter of the alphabet that the party's name begins with, as Brown under "B," and when the order is received from Mr. Brown we have only to go and look under "B" and find his letter at once and see what price we have made him. We also keep a copy of the quotation in letter copy book, but the trouble with this manner of keeping quotations is the time it takes to look same up, while in the manner as suggested above it can be found at once. The advantage of copying the quotation is that if the carbon copy should be lost you can refer to the letter copy. We have found this the most satisfactory way of keeping quotations.

In regard to pricing goods to both the wholesale and retail trade, the only way it seems to us this can be satisfactorily done is to have the goods marked at cost, also the retail price marked on same, and then furnish each traveling man with a price-list of all goods and what he can sell same at, and then to have a man for the purpose in the house to make prices to the wholesale trade where the orders are by mail and not made by the traveling men.

In regard to the manner of pricing goods to factories and contractors, the most satisfactory way to do this, where the trade will justify it, is to have a man look especially after this class of work and keep himself well posted on the prices the firm desire to sell them at. It is very difficult for two or three to price the same parties on the same goods without making a difference sometimes in the price, thereby causing confusion and dissatisfaction.

A PENNSYLVANIA FIRM EMPHASIZE THE IMPORTANCE OF A GOOD MEMORY.

We presume every hardware house experiences somewhat of the difficulty explained by your correspondent. The best suggestion that we could offer is that the class of trade which he mentions, factories, contractors, etc., should all be handled, so far as possible, by one man in the house, so far as making prices is concerned, and he ought to be fortified with an up-to-date price book. In our own business we use our illustrated catalogues, which serve the

purpose of a price book as well, by making pencil memorandums. A good memory is an excellent factor.

A MAINE HOUSE USE A LETTER FILE.

We think the best method of keeping track of prices, in addition to their being kept in the letter book, is to have a file. We use an Amberg letter file with 45 drawers, which we find very nice in referring to quotations, in addition to other things which we use it for.

SUGGESTIONS FROM AN ENTERPRISING HOUSE IN NEW YORK STATE.

The information requested is very difficult to give understandingly.

The conditions are different in many sections, and the sales on this line of goods are regulated, to a certain extent, by the quantity purchased. We do not know of any fixed rule which would govern a business of this kind. We think that a large business should be classified strictly into different departments, and one man in each department should make the price to the customer purchasing that class of hardware. We do not see any other way to prevent the consumer obtaining various prices for the same quantity of goods purchased.

If some one man is responsible for each department, he is thoroughly familiar with the prices to which the different customers are entitled. He should, in connection with that, keep a book showing the record of different prices made to different people who are continuous buyers.

The book should be kept systematically, so that a man from another department, in case of necessity, would be able to find what prices a customer had been getting.

We find in our business that where a good, bright and intelligent salesman is placed in charge of one department, and is made responsible for the success of it, he generally succeeds in doing what he undertakes. It is very hard to find a general salesman who is thoroughly familiar with so large a line of goods as is generally kept at the present time. We think that the head of a department should also keep track of the prices, or, in other words, he should be the purchaser for that department where it is practicable. This, of course, only applies to goods in complicated lines.

To sum the whole thing up, we believe that system, good salesmen and classification of departments is the only road to success at the present time in business.

We are sorry we cannot give you any information which will be of benefit to you in this instance. The suggestions which we make are, as you know, known to all business men.

DESCRIPTION OF A METHOD USED IN OHIO.

There are several ways in which prices

to individual customers can be kept track of, two of which are given below.

In one instance, where a large house do a business of the kind mentioned, the prices are noted in a book with marginal index, under headings showing the different articles, as follows :

ROPE, MANILA.		
	Coils.	Cut pieces.
Johnson, Jones & Co.....	DV	Add—per cent.
Hartman, Field & Co.....	DV	FJ
The Smith Mfg. Co.....	DM	FJ
Ketcham & Killem.....	DM	...
Sweetzer & Ohl.....	DV	...

The book has some 600 pages and is kept on the desk of the man who checks the bills before mailing, and he keeps the prices posted, writing the names in ink and the prices in pencil. It is where the salesman can consult it easily, and acts as a perfect preventive of irregularities. It is some trouble to get a system of this kind in running order, but when once established it is easily followed out.

If desired, the records can be kept upon cards filed under the card index system now so much in vogue, but in that case each firm would have to be given a separate card, with the prices on all articles bought by them entered thereon, as the cards would be too small if headed with the name of the article.

METHOD USED BY A WHOLESALE HOUSE IN OHIO.

This subject is a very important one, and we think most dealers are called down occasionally on prices not being the same as charged before. When we quote prices by mail the price clerk makes notation of prices on the inquiry letter, then the reply to inquiry is copied in copy press book and indexed, so it is an easy matter to refer to quotation should you receive an order from the party quoted.

In our opinion there is but one way to price goods, and that is to have two prices and adhere to them. Your regular price is for customers who buy in small quantities, or are slow pay, and the other is for large buyers and prompt pay. Classify your customers, and when a salesman sells a bill to a regular customer he will know which class the customer is in; if not, he can find out from the price clerk. The customer who takes three to four months' time on goods, or pays "on account," and never has the account up to your terms, should not expect to buy goods at as low a price as the man who pays promptly.

Goods are sold too close these times to give more than 60 days' time, and as soon as the time runs longer than 60 days it begins to eat into the profits, and it don't take long to eat it all up. You can always get a discount on goods for cash, but in order to take advantage of the cash discount

80 % INCREASE . . .

The Spring trade is over—still we never were so busy at this time of year before.

We find by our sales report to 1st July, we have sold in Canada 80% more of

The Sherwin-Williams Paints and Varnishes

than during the same period a year ago. We aimed at 100%, and are quite confident we can accomplish this before the close of the year.

Every week shows large gains—good healthy advancement. Progress is our everlasting watch-word—solid, steady, substantial progress. Dull times, bad weather, and such like we have nothing to do with. Goods like *S.-W.P.* make their way against all obstacles.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

you must get prompt payment from your customers.

If you are fortunate enough to have the means to carry your customers longer than the terms of sale, you cannot afford to loan money without interest, and that is practically what it amounts to.

We will be glad to improve our method, and will read with interest the different methods in use.—Iron Age.

RICHARDSON FOR SCOTLAND.

C. W. Richardson, Toronto, sailed from Quebec the other evening for Glasgow, with complete credentials to represent the C.W.A. at the championship of the world races on July 30 and 31 and August 2. This rider was chosen by the Executive on his good showing at Chatham, and, in fulfilment of the promise of the C.W.A., Dr. Doolittle and R. G. Fisher have also credentials to represent the C.W.A. at the annual meeting of the I.C.A. at Glasgow, and instructions to obtain, if possible, the world's championships for July, 1898. Canada having a rider at the meet, and two good representatives, should obtain this grant, and if the C.W.A. are successful it will bring to this country the fastest amateur and professional riders from all over the world in July, 1898.

PHOSPHORUS IN UNITED STATES STEEL.

Of American steel for the wire trade, The London Iron and Coal Trades Review says: "There is little doubt that, if American mild steel could be kept under 0.08 per cent. of phosphorus, it would meet with a far more cordial reception in England, but conversation with those who have tried the steel shows that the percentage of phosphorus is likely to be anywhere from 0.06 up to 0.15 per cent., which will not, of course, do for the wire trade, for instance, in which the American steel makers had hoped to be successful in selling their billets. One or two large wire firms, who have bought American steel in quite considerable quantities, have found it far too irregular to warrant further orders being placed, although considerable advantages in price were offered. The fact is that, while wire made from such material may be quite suitable to the American fencing and barbed wire industries, it is just as unsuitable to the English wire industry, which depends essentially on the manufacture of high quality wire, the best grades of which some of our foreign friends have not yet been able to sell in competition with us."

TRADE AND WORSHIP.

THE International Convention of the Epworth League, which met in Toronto last week, will have done one good and important service if it has brought home more fully the lesson that nations ought to dwell together in good business relationship as well as in Christian fellowship.

For many years it has been conceived by the great majority of people living within both Canada and the United States that a Customs tariff is necessary to the existence of the respective countries. As to the wisdom or otherwise of this doctrine we have nothing to say. We can with good grace leave the question to Free-traders and Protectionists for consideration.

But while the political economists of the various schools are dealing with the question, all commonsense business men will agree that at present, yes, and for some time to come at least, the fiscal conditions now obtaining will continue to exist. It would be utter folly to think anything else.

But while Customs tariffs may exist, it by no means follows that tariff warfare should. A nation can protect itself without striving in every conceivable way to maim and injure its neighbor.

It is the business of a government to promote international amity as well as international trade; but this is a tenet in the code of national manners of which the United States appears to have no knowledge whatever. It is possible, of course, that the explanation is to be found in evil intent and not in ignorance.

We are again and again reminded that the people of the United States are rich in estimable qualities. And the more we are brought into contact with them the more apparent does this become.

In every movement to defeat the forces of evil and advance the cause of religion they are ever ready to join their forces with those of Canada. Last week's convention in Toronto is only one of the many instances of that.

But let the subject for consideration appertain to the trade and commerce of the two countries; and what a difference!

Instead of extending to Canada the glad hand it is the cold shoulder the United States turns toward her, while, whenever it is engaged in remodelling its tariff it is certain to deliberately train its guns on some Canadian industry with a view to accomplishing its destruction.

We are told that this is largely the work of the politicians. May be it is. But it is passingly strange that while the men placed at the guns at one election may be changed at another the desire to throw shot and shell at Canadian trade still remains.

Among the speakers at last week's convention was one who urged that the Leaguers, as individuals, should take a lively interest in political and economical questions. The advice was well given. And it is to be hoped its fruition will be seen in greater concentrated effort to elect to Congress and to Parliament more honest men, possessed of business commonsense, and fewer dishonest and unbusinesslike men than are now to be found within these representative institutions.

Where the spirit of international worship is there should also be the spirit of international trade.

TERNE PLATES VERY SCARCE.

SCARCITY of terne and tin plates is a fact that has been apparent for some weeks back in Montreal, and brokers who have orders to fill state that it still continues and that stocks generally are a long way from being well assorted. This is not only the case in the east, but in the west, as well, for though the actual jobbing distributive demand is not sufficiently strong at present to bring it out forcibly, commissions received this week from firms in Hamilton, London and other points to try and pick up some plate in Montreal, testify that jobbers, whether the demand may be brisk or the reverse, feel that they would be all the better for having a large supply on hand. The scarcity of ternes is the most apparent. Advices from Wales do not indicate that there is any difficulty with stocks at primary markets, but the fact remains that brokers and commission men are unanimous that shipments are not coming forward half as fast as they wish. Last week ternes in round lots of 50 boxes up were invoiced out of Montreal at \$5.90, but it is extremely doubtful if a buyer could place an order at as low a figure as the above this week.

On the 1st of July the law by which the interest on post office savings bank deposits was lowered from $3\frac{1}{2}$ per cent. to 3 per cent. took effect, and since then some notice has been taken of the returns as they come in at Guelph to ascertain whether the change will have any effect in decreasing the deposits. So far it does not appear to have operated there in that way at all.



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Far in excess of any other Powder—Nitro or Black.

Pattern 233.

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"Rifleite '450." For Sporting, Express and Military Rifles, '360 to '577 bore.

(SK) For Rook and Rabbit Rifles of '230 to '380 bore also for Morris Tubes.

(SV) For Revolvers.

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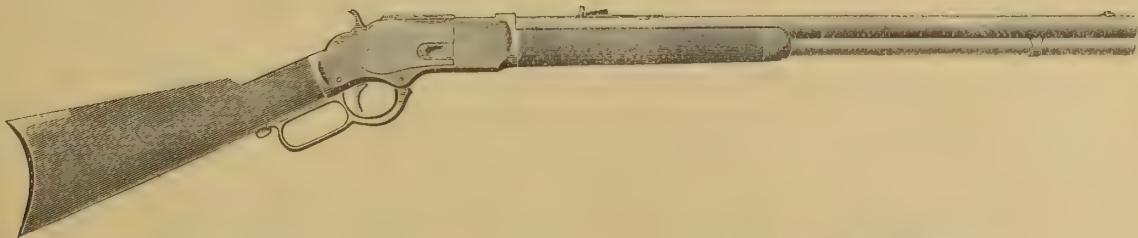
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Graham Cut and Wire Nails are the Best.

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Loaded Shells, Shot, Wads and Caps

H. S. HOWLAND, SONS & CO. - TORONTO

LUMBER BOOM IN ST. JOHN.

THERE is a decided boom in the lumber business in this port; in fact, there has been nothing like it known in the city before. The port is alive with vessels, and every available man is busy stowing them with lumber. Whether this rush is due to the fact that the winters have demonstrated St. John to be a great centre for freight or not, the fact is the vessels are coming here, and are being supplied with cargoes. While the cause of the boom may not be easily explained, yet anyone who visits the wharves will admit that there is a decided rush.

There were in port yesterday 15 ocean steamships, totalling 25,655 tons, and 16 sailing ships, totalling 13,582 tons—in all 39,247 tons, loading for the English and continental market.

It is estimated that the quantity of spruce which these vessels will take away will be not less than 25,000 standards, or in round figures 50,000,000 superficial feet. This, in addition to 6,000,000 already shipped this month, will make the shipments for July the largest for any one month on record, and will come within a few millions of being half as much as shipped during the previous half year, viz.: 106,000,000 superficial feet. The total for July in the two past years was:

1895—18 millions.

1896—25 millions.

This list does not include the vessels loading for the United States market.

Many are watching the action of the United States senators and their tariff tinkering. The law which has been in effect across the line for the past few years allowed all lumber cut on American soil and sawn by American mill owners here to pass into the United States free of duty, while no matter whether the lumber cut by Canadian mill owners was taken from American soil or not, the Canadians would have to pay the duty.

In the vicinity of this city there are 15 saw mills. Four of these have Canadian owners, while the other 11 are owned by Americans. The Canadian mills above the falls are Messrs. Randolph & Baker's, at Randolph; George Barnhill's mill at Pleasant Point, W. H. Murray's mill at Marble Cove; and below the falls is Messrs. Hilyard Bros'. mill on the Strait Shore.

The American mills above the falls are S. T. King & Sons', at Kingsville; Andrew Cushing & Co.'s, at Union Point; C. F. Woodman's two mills at Milford; Mr. Charles Miller's mill at Pokiok, Stetson & Cutler's mill at Indiantown and another at Pleasant Point, Dunn Bros'. mill at Grand Bay, E. D. Jewett's mill at Millidgeville, and below the falls are Purves & Murchie's

mill, West End; James F. Hamilton's and James R. Warner's mills at Strait Shore.

The new clause of the Dingley bill says that to have lumber admitted to the United States free it must be the product of American labor, that is sawn by American workmen.

Out of about 700 workmen who are engaged in the 11 American mills here there are, as far as can be learned, only 25 American workmen, while the rest are staunch Canadians.

A prominent millman told a Telegraph reporter yesterday that the idea of importing American labor to escape paying duty could not be thought of, for if such a thing did come to pass Canadian millmen would be out of work, and this would not be tolerated. It comes to this, the mills would have to shut down or pay a duty to get their lumber into the American market, where it is now free.

When the Wilson-Gorman tariff bill went into effect in the United States it reduced the duty on shingles 30c. per thousand. The mill owners did not lose or gain anything on the change, but the American consumer got his material 30c. per thousand (or four bunches) cheaper than before. Now, when the new clause of the Dingley bill goes into effect (if it does so) the duty on shingles will again increase 30c. per thousand. To meet this duty the mill owners will raise the price on the shingles.

The shingle mills in St. John are Mr. Charles Miller's mill with nine machines; Charles F. Woodman with 14 machines and Mr. S. T. King's, two machines. The demand for shingles at present is said to be good.

Nearly all of the American mills are at present cutting deal for the English market, and are all being kept very busy.—Telegraph, St. John, N.B.

A REVIEW.

MR. GEORGE HAGUE, general manager of the Merchants Bank, Montreal, in his annual address, says:

"I may say this, however, that it is hopeless for manufacturers of any kind, in these times of keen competition, to make profit on their business unless they have the latest appliances in machinery, the most economical appliances of power, the most skilful management in production, the best adaptations of labor, and the best facilities for transportation and communication. Along with these, it is becoming more and more essential that a manufacturer shall have his specialties; that is, that he should produce some goods which are his own, known by his name, which will be such a guarantee of goodness that the name will sell the goods,

as with 'Rodgers' cutlery or 'Horrocks' sheetings. When a manufacturer attains a position like this, and has his arrangements to keep it, he is a long way towards permanent success and wealth. In some branches of manufacture and production we have attained this position. Certain brands of flour are well known in foreign countries, as well as certain brands of cheese, and even of deals and timber. A customer of our own has established the reputation of his brand of eggs in the English market, and enquiries are made for it by dealers there. We are exporting furniture to South Africa, agricultural implements and other articles to Australia, butter to Japan, and leather in large quantities to England; and if attention is only paid to quality, to good make-up, and to the exact needs of the market, there is no reason why this should not develop very largely. In such matters as butter or apples it is not sufficient to have simply a good article, it must be well and tastefully packed, according to the fancies of the market it is sent to, or they can never establish themselves in general favor.

"Our apple exports of last year were frightfully injured by want of care in packing, and the trade injured to an extent it will take considerable time to recover from. Our orchards are well known to be among the best in the world, and so are our vineyards and peach gardens. I mention this for the benefit of any who may happen to read these words, to dispel the impression that Canada is a land of almost perpetual snow. I do not think we are at all obliged to the enterprising English poet who lately sung our praises as the 'Lady of the Snows.' We have snows, it is true, and exceedingly useful they are, as fertilizing the ground for the spring and summer, and enabling us to produce such fine peaches, grapes, melons and apples as we do. While on this subject I may venture to say that much harm has been done to the country by the multiplication of snow pictures. We have had altogether too many of this sort. It would, I think, be a profitable venture if an illustrated book were published showing what Canada is in summer."

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

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and
Winnipeg
Capital, \$2,000,000
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MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
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BOWMAN, KENNEDY & CO.

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Linseed Oil
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Window Glass
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White Lead
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Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

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QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

The OXFORD CHANCELLOR

The Cheapest and Best

WOOD RANGE...

Handsomely Nickerled and
Attractive in Appearance.

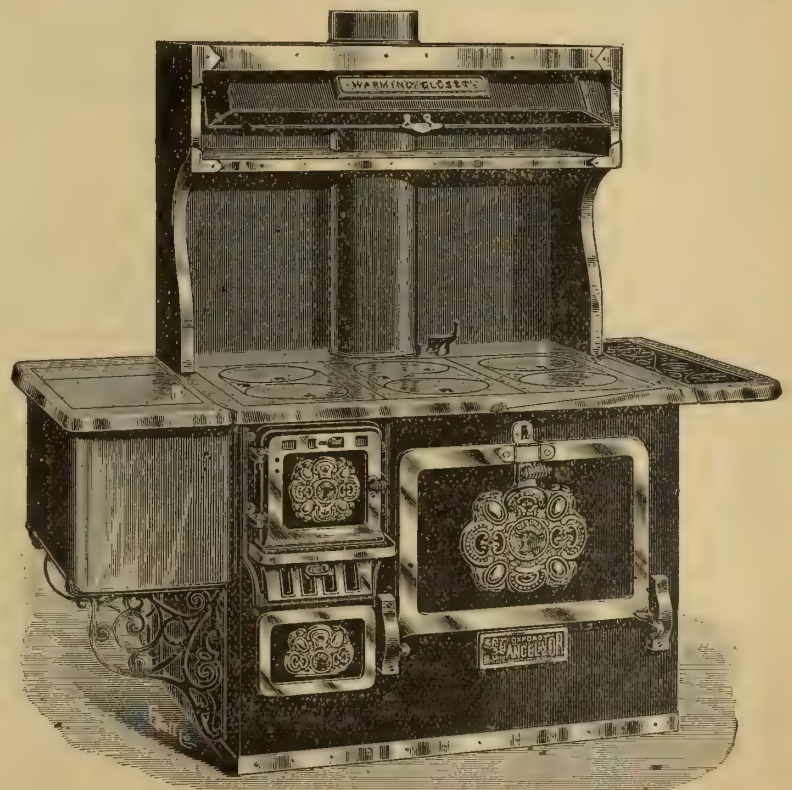
Large Oven
Drop Oven Door
Oven Plates Asbestos Lined
Large Fire Box
Fire Back Extra Heavy
Fire Back in One Piece
Dump Centre Grate
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Loose Interchangeable Top

NOTE.—An additional draft slide is placed at top of fire door, and by means of an inside shield the draft is conducted down and introduced at bottom of fire box, controlling the fire, and making THE CHANCELLOR the most economical wood-burner in the market. Reservoir can be attached or detached in five minutes.

CAN BE SUPPLIED WITH COAL FITTINGS.

The Gurney Foundry Co., Limited, Toronto

THE GURNEY-MASSEY CO., Limited, MONTREAL.



Cooking Surface, 39 x 30 in.
Oven, 20 x 22 x 14 in.

Fire Door, 8½ x 7½ in.
Fire Box, 28 in. long.

LUBRICANTS.

THE oldest and cheapest lubricant was water, but in consequence of heating and evaporating due to friction it had to be constantly replenished. The progress, however, of mechanics required other materials to lessen the friction, and something which would not require as much replenishing as water, and, therefore, plumbago or graphite was introduced, and then, later on, oils. But, before the general introduction of steam machinery, lubricants received practically little or no attention, and even the greatest mechanics of those days in their experiments on friction used only oil, soap and lard. But on the application of steam as a motive power, which caused an enormous increase in the use of machinery, the question arose and began to assume a degree of importance, and the attention of owners of machinery was directed to the object of how best to obtain a maximum of lubricating power at a minimum cost. For the lubrication of the cars in the early days of railways only solid lubricants were used. These were principally prepared from tallow and train oil, or colza oil, to which was frequently added sulphur on account of its cooling nature and effect upon the rubbing parts, and to keep a low temperature in the bearings. In 1831 Booth introduced a patent palm-oil lubricant, which consisted of palm oil 12 parts, tallow 6, water 8, soda 1; this lubricant was extensively used, and we might say exclusively, for several years by all the English railways, and to some extent is even still used at the present time. It was also very extensively used on the continent, especially by French and Belgian railroads; while in Austria and Germany a similar lubricant was used, in which, however, the palm oil was occasionally partially or entirely replaced by train oil or colza oil.

When the minds of men woke up to the great demand for lubricants (with the use of steam as a motive power becoming more general) they began to put all sorts of lubricants on the market, some of which were of a doubtful character, and the results of such were that they did not justify consumers in using them to any extent. These mostly went under the name of anti-friction lubricants. These principally consisted of various fats, such as horse-fat, bone-fat, waste fat, etc., being partially saponified with potash or soda and compounded with plumbic oxide or graphite. But the principal object was to intermix with these so-called lubricants as much water as possible, so as to be able to put a cheap competitive article on the market. For at that time the general managers of railroads were chiefly interested in the economical question, and therefore overlooked the greatest feature of

a lubricant—viz., its quality—and laid no stress upon interruptions of traffic and costs of repairs caused through hot journals, etc., which might have been avoided had they turned their minds to the all-important fact of the quality of the oils they were using.

Consequently colza oils and olive oils were generally introduced in the 'Fifties, but they had to meet the competition of rosin oils and tar oils made under fancy names, such as patent axle grease, cohesion oils, etc., which were occasionally used for the adulteration of colza oil. In the United States train oils, and sperm oils especially, were chiefly used for lubricating purposes. But the use of sperm oil had very soon to be abandoned for a time, as the price rose too high for extensive use by railways, and recourse was then had to vegetable oils, such as colza, etc.; but on the decrease in price of sperm oil the latter was more frequently and extensively used.

Then came the first modern mineral lubricating oil, known as Noble's lubricating oil. This oil was obtained as a by-product in the dry distillation of cannel coal for the manufacture of illuminating gas. This kind of oil was of a clear and transparent nature, and of a slight violet color. Although this was a suitable lubricant, it was not, however, extensively used. However, when the Pennsylvania oilfields were opened some very extensive experiments of different natures were made with the so-called mineral oils, and although mineral oils for the purpose of lubrication were at first received with but little favor, they soon made headway, in the United States especially. Soon this class of lubricant began to take up a position in the front rank, and, consequently, improved methods of treating these oils resulted in very greatly improved products, while the refining and development of the mineral-oil industry resulted in their being prominently brought forward and very largely used on all classes of machinery, particularly for that running at high speed or elevated temperatures, and engineers and mechanics find that it is by far superior to colza oil for lubricating pistons and side valves of stationary engines, being by far preferable to the latter, because, as the latter oil suffers decomposition under the influence of high tension steam, the free oleic acid which is formed attacks the sliding surfaces of the cylinders. Also another great feature in the eyes of those using mineral oils for lubricating pistons and side valves is that mineral oil is very clean and free from gummy substances, and being of a free nature enables perfect lubrication of the piston and side valves.

In reviewing the principal features and lubricating values of oils it must not be forgotten that there must always be sufficient

body to keep the surfaces between which it is interposed from coming into contact with each other; there must be the greatest fluidity consistent with "body," a minimum coefficient of friction, a maximum capacity for receiving and distributing heat, a perfect freedom from tendency to gum or oxidize, an absolute absence of "acid" and other properties injurious to the materials in contact with it, high vaporization and decomposition temperatures and low solidification temperature; special adaptation to the conditions of use and freedom from all foreign matters.

The modern methods of testing the lubricating qualities of oils are mostly directed to a discovery of the following points: (a) Their identification and adulteration; (b) density; (c) viscosity; (d) gumming; (e) decomposition, vaporization and ignition temperatures; (f) acidity; (g) coefficient of friction.

A NEW SNAP.

A new snap called the "Derby" has just been placed on the market. This snap, which the manufacturers claim is unequalled, is the result of extensive experiment.



It has a plated rust-proof spring, guarded by the overhanging edges of the cheeks of the snap, a patent feature, which is to prevent the spring from being sprung out, or in any way misplaced. The patented retaining hook of the spring holds it immovable.

These snaps are manufactured with loop, swivel, round edge, etc., and will answer all the purposes of every style of snap.

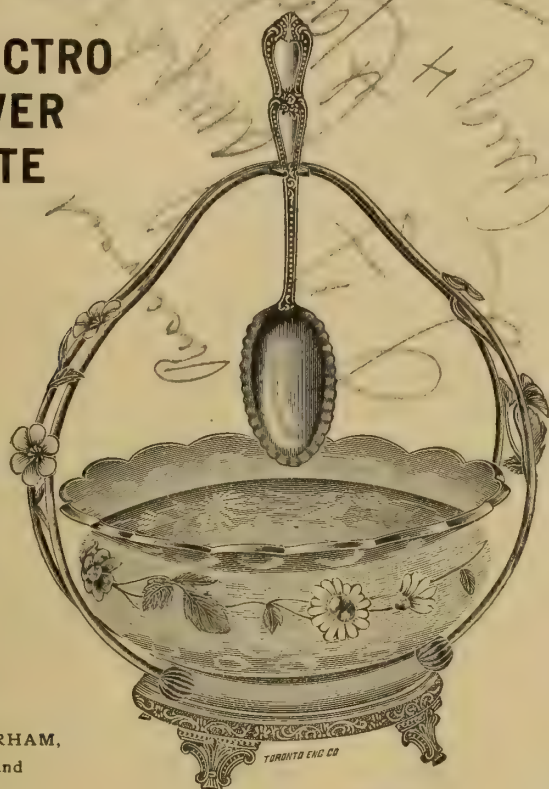
The Covert Manufacturing Co., West Troy, N.Y., are the manufacturers.

TO CLEAN WINDOWS.

The Supply Journal says: Choose a dull day, or at least a time when the sun is not shining on the window; when the sun shines on the window it causes it to be dry-streaked, no matter how much it is rubbed. Take a painter's brush and dust them inside and out, washing all the woodwork inside before touching the glass. The latter must be washed simply in warm water diluted with ammonia. Do not use soap. Use a small cloth with a pointed stick to get the dust out of the corners; wipe dry with a soft piece of cotton cloth. Do not use linen, as it makes the glass linty when dry. Polish with tissue paper or old newspapers. This can be done in half the time taken where soap is used, and the result will be brighter windows.

THE TORONTO SILVER PLATE CO., Limited

Silversmiths and Manufacturers of

**ELECTRO
SILVER
PLATE**Factories
and
Salesrooms,
King St. W.,
Toronto,
Canada.E. G. GOODERHAM,
Manager and
Sec.-Treas.

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**Cavalier and Pelham
Bicycles****AT COST PRICE**We guarantee these to be the best value in
Canada. Write us for prices, they will con-
vince you.**Caverhill, Learmont & Co.**

Wholesale Hardware and Metals.

MONTREAL

Metal Department**TIN PLATES** (our Standard Brands.)**M. L. S. CROWN** "equal if not superior to Bradley."**VULTURE** first-class ordinary Charcoal.**MUREX.**

We carry good stock of the above in all saleable sizes.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

HOME TRUTHS FOR THE JUNIORS.

"DISCRETION shall preserve thee ; understanding shall keep thee." So saith the wise man. Also "With all thy getting get understanding." Now these maxims, although 3,000 years old, are as full of force as ever, and equally applicable in our own generation. It is because so many cannot, or will not, see the force of them, that it is only the few that are not broken on the wheel of life. I particularly desire to warn off those who are starting life in our own line of business, especially the budding ironmongers (I mean sons of ironmongers, who hope some day to become partners in the firm), from the pernicious but frequent habit of taking things for granted, without the least effort or desire to find out why they are so. Pay respectful obedience to those over you, for it is only right that you should ; but don't be so foolish as to rely solely upon their brains—they won't always be able to think for you. For instance, if you are a bad hand at discounts, and have a customer who is getting vexed by the delay, by all means go to a senior, who will tell you the result in a moment. Why? Simply because he has mastered a system, which, when understood, is simplicity itself, and saves no end of calculating. At a favorable opportunity (and here comes in discretion) ask the senior how he could tell you so quickly, and he will tell you, perhaps, that if you want to take of 40 per cent. from 15s. all you have to remember is that 40 per cent. represents 8s. in the pound, or 6s. to be deducted from 15s., and many other suchlike items, that will help you to feel at ease with the most exacting of clients; for I am well aware that there are those who take special delight in trying to make a junior ill at ease. Mark you! I say, choose a favorable opportunity to ask your senior—in other words, use "discretion," and it shall "preserve thee" from an unfavorable reception. We all get over-busy at times, and often irritable in consequence, but we don't omit to notice the man who watches for a suitable time, instead of adding fuel at the wrong time. We value and like him because we feel his head and heart are both in the right place. If his ability should not be quite so pronounced as another's, he will win his way and get helped, where a more brilliant but indiscreet youth would not. Remember also that he who (abnormally) loves pleasure will be a poor man. It means work if you want knowledge, and knowledge means power and wealth in the long run. There is absolutely no excuse now for not acquiring technical knowledge. Every village has its institute and every town its technical school or college, where acoustics, statics, hydrostatics, dynamics and mechanical drawing—all of which are most essential

if you would excel in our scientific business—can be studied frequently at small cost or gratis.

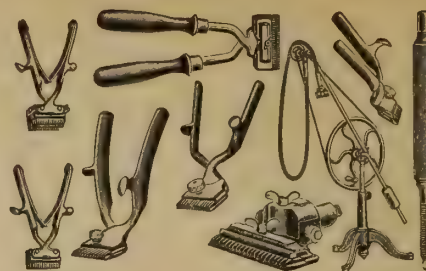
Make a study of scientific window-dressing, and let even your waste books in the shop be the pink of perfection in lucidity and neatness! Don't put down half particulars so that the clerk has to run all over the place to find out what you, who had them before you at the time, ought to have collected and placed down with the entry. Be thorough, and quick with it if possible ; but don't lose thoroughness for speed—that will come in time. You will never find a slipshod man do a really good day's work as long as you live. Do your best to understand all those about you—governor, buyers, fellow-assistants and workmen even, for by so doing you will best serve both your own ends and theirs. Have method in everything, even to arranging and sending out goods. It is neither discreet, kind nor profitable to cause a porter three journeys where one would have done. Just ask yourself how you would like to do your own work three times over because some "responsible" person saw no further than his own nose all day long. If you hate doing up parcels because they don't always go just right at once, don't bundle them up anyhow, and when no one is looking put them into any bin that will take them, instead of undoing them possibly two or three times until you can make them the proper size, square and tight, to go into their proper places. Possibly next time the parcels are wanted two or three minutes will be wasted in finding them, and the other assistants shamed in the customer's eyes all through your lack of interest. If you cannot find out the proper way yourself—ask!—get understanding! and don't be content till you have thoroughly mastered the situation!! Practise betweenwhiles and you will be certain to succeed—the habit of being exact, careful, discreet and wise in small things will make you a joy to your seniors and a mine of capabilities and possibilities to yourself. In the future you will be fitted for places of honor and responsibility. Delays are dangerous! Start right and keep straight!—Ironmonger.

PERSONAL MENTION.

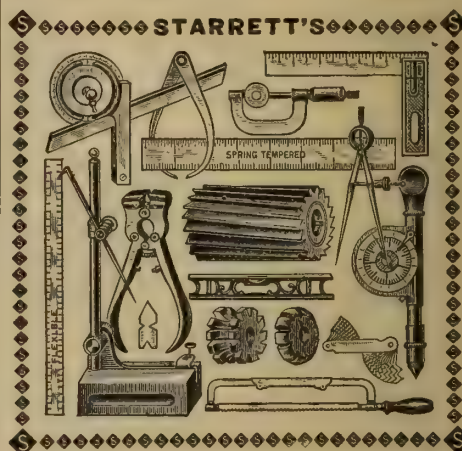
Mr. Teugar, of P. D. Dods & Co., Montreal, is in Toronto.

The travelers of Toronto will hold a moonlight excursion on the evening of August 11. The Chippewa has been chartered and the Verdi quartette will render the requisite music.

The Port Credit Herald says that Messrs. Thomson & Blakeley have purchased the planing mill and property of that place. The price paid was \$1,000. They intend putting in more machinery.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.



FINE TOOLS

98 Page Catalogue Free.

THE **STARRETT** CO. Box 5
ATHOL, MASS., U.S.A.



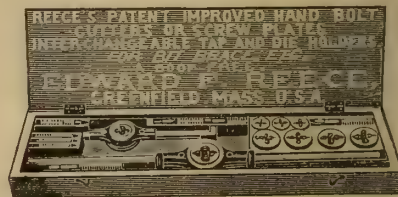
COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.



PERSONS addressing American advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

ESTABLISHED 1860.

INCORPORATED 1895.



Steel Enamelled Ware

“CRESCENT,” “ROYAL” AND WHITE.

If you want a line of goods that will please your customers, send along your orders for any of the above brands, and you will get Enamelled Ware that will give entire satisfaction.

We are busy filling orders for these goods,
but are always anxious for more business,



GUARANTEED not to Chip or Burn.

The THOS. DAVIDSON MFG. CO. Limited

MONTREAL

LOOK YE OUT BUSINESS MEN.

BEFORE a great while Ontario will be in the throes of another general election, and it is time the business men in the province were bestirring themselves.

As in the House of Commons so in the Ontario Legislature, we want men who can look at each and every question which comes up for consideration from a practical, business standpoint.

It does not matter one iota whether an applicant for legislative honors be raised on the sincere milk of Conservatism or of Reform, but it does matter a great deal whether or no he has been schooled in the school of practical business commonsense.

Of course unqualified as well as qualified men will aspire to the honor. But the duty of the business men of the province is to try and separate the chaff from the wheat. And the winnowing should not be left to election day. It should begin now. At the party nomination it should be actively carried on, and thereafter every day until the ballots have been cast.

The political power of the average merchant cannot be estimated by his ballot, but being more intelligent and possessing a broader knowledge of the questions of the day than most classes of voters, he naturally must possess the additional factor of influence.

It is to the exercise of this influence, as well as their vote in the interest of commonsense business men for the Legislature of Ontario, that **HARDWARE AND METAL** calls the attention of the merchants of Ontario. They owe it as a duty not only to themselves, but to the business interests of the province as well.

The next Legislature must be cleared of the Patrons. That is one thing upon which business men must centre their energies. The Patrons were conceived in illusion and cradled in selfishness. The sooner they are dead and buried as a political and commercial organization the better.

We do not want a business men's Legis-

lature. That would be a class Legislature. And that is something to which **HARDWARE AND METAL** is strongly opposed.

What is wanted is a sufficient number of business men in the Legislature to ensure business commonsense in its proceedings and business commonsense in the construction of its measures.

In other words, we want business men for business, and the onus of securing them is upon the mercantile interests of the country.

MR. M'MICHAEL GOES TO ST. JOHN.

ALARGE and merry company of young men gathered in one of the parlors of the Rossin House, Toronto, at 4 o'clock Wednesday afternoon, the occasion being a presentation to one of their friends, Mr. Peter McMichael, an employe of James Robertson & Co., Limited, who leaves town on August 1st to assume the management of the company's branch at St. John, N.B. The presentation was made by his business friends, men who have been in daily commercial relations with him, and who have learned to admire and respect his manly and generous qualities. Mr. J. H. Paterson, of the Toronto Hardware Co., presided, and the gift, a magnificent diamond ring, was presented, in appropriate terms, by Mr. Charles D. Bingham. A beautiful illuminated address in album form was read by Mr. A. G. Booth.

The address was couched in the following language: "Being informed of your intended departure from the Toronto branch of the firm of Messrs. James Robertson & Co., Limited, where from almost your boyhood your wholesoul'd presence has ever been as familiar as the noonday sun, a few of your most intimate business friends feel that they cannot allow you to depart from among them without expressing in some slight degree the deep sense of appreciation they always had for you, and they therefore ask you to accept the accompanying, and hope that from the many scintillations that

spring from its depths you may see a few that will occasionally remind you of the days of Auld Lang Syne. We hope that in your new position of higher trust and responsibility you will find for you and yours many long years of health, wealth, prosperity and happiness."

Among the signatures to the address were the following: The Booth Copper Co., Limited, per G. H. Booth; Montreal Rolling Mills Co., The James Morrison Brass Mfg. Co., Limited, John Ritchie Plumbing Co., Limited, Toronto Foundry Co., Toronto Radiator Co., Limited, Toronto Steel-Clad Bath Co., Limited, Gurney Foundry Co., Limited.

Mr. McMichael was profoundly impressed by the event, and responded in suitable and heartfelt terms.

THE CLERK AND THE CUSTOMER.

It is very noticeable and furnishes a great deal of amusement at times to explain names that people use in asking for goods in a hardware store. Why is it that so many people call for twisted screw-drivers when they want corkscrews? Perhaps it is because they are used somewhat similar. It has been observed, whatever the reason, that a confusion exists of the two articles on the part of men as well as ladies, only a lady asks for a corkscrew when she wants a screw-driver, and men the reverse, and then look at you in a surprised sort of way when you show them the article demanded.

Another case very noticeable is when people want a cover-lifter they ask for a stove-lifter, and clean tacks when they mean tinned tacks. A lady came into a hardware store and wanted a pair of clinchers. Noticing the look of amazement on the clerk's face, she said, "You know, like this," making a motion with her thumb and finger which suggested to the clerk's mind she wanted tweezers. When a man wants an article he does not know the name of, out comes his pencil and he grabs a piece of paper and gives you a drawing, and you guess the rest.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, July 23, 1897.

HARDWARE.

THE movement in general hardware circles has kept up surprisingly well considering that the midsummer weeks are usually quiet ones. Barbed and plain wire have not increased in demand as a result of the declines, but a fair business has been done in wire and cut nails, while horseshoe nails, horseshoes, screws, bolts and rivets, have exhibited genuine activity. Jobbers here have advanced the price of sisal. Ice cream freezers have moved with more freedom owing to the hot weather, and harvest tools have continued fairly active.

BARBED WIRE—The decline has not led to any material increase in business yet. Round lots are quoted at \$2.20 and jobbing quantities \$2.25 f.o.b. Montreal.

PLAIN WIRE—There has been little change in this market since last report. Discounts are 30 and 5 off f.o.b. Montreal for this province.

WIRE NAILS—There is a fair business doing in wire nails, but not a particularly large one, nor is it to be expected this month. We quote on the basis of \$1.90 to \$2 f.o.b. Montreal, according to quantity.

CUT NAILS—Business remains of moderate dimensions and the basis is \$1.85, f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Business in horse nails is fair, but orders are individually for very small lots. Discount, 50 per cent.

HORSESHOES—Business in horseshoes continues fairly active. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—The movement in screws is briskly maintained. Discounts are as follows: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Business continues quiet, with discounts at 12½ per cent.

BOLTS—Demand for bolts has been well maintained. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾ c. off the list, and hexagon, 5¼ c.

RIVETS—The same remarks apply to rivets. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—Jobbers here have advanced their price ½ c. per lb. on sisal. Manilla is unchanged. Demand is fairly active. We quote: Sisal, 7-16 and upwards, 5½ c.; ¾, 6½ c.; 5-16 and ¼, 6½ c., and 3-16, 7½ c.; manilla, 7-16 and upwards, 7c.; ¾, 7½ c.; 5-16 and ¼, 8c., and 3-16, 8½ c.

CHURNS—Business quiet and discounts the same: 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—Much the same, with values \$28 to \$31.50, as to brand.

ICE CREAM FREEZERS—Demand for the smaller sizes such as 2 quart capacity has been quite active. They are quoted at \$1.30.

HARVEST TOOLS—There has been a good movement in these.

SPADES AND SHOVELS—Business rather quieter.

FILES—There is a fair enquiry for these. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

BUILDING PAPER—Business has continued brisk. We quote: Plain building, 30c.; tarred lining, 40c., and do. roofing, \$1.40.

LEATHER BELTING—Business quiet and without feature. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

HINGES—There is a good enquiry. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WIRE CLOTH—Demand very active for wire cloth and screen doors and blinds.

CUTLERY—A few small orders arrive of a sorting character.

SPORTING GOODS—Business remains quiet in this line.

SHOT—Unchanged. We quote: Dropped shot, 16c.; chilled shot, 6½ c., and buckshot, 7c., less 17½ per cent. trade discount.

CEMENT—Business in cement has been rather quiet, owing to the extreme heat as well as wet weather. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2, ex wharf.

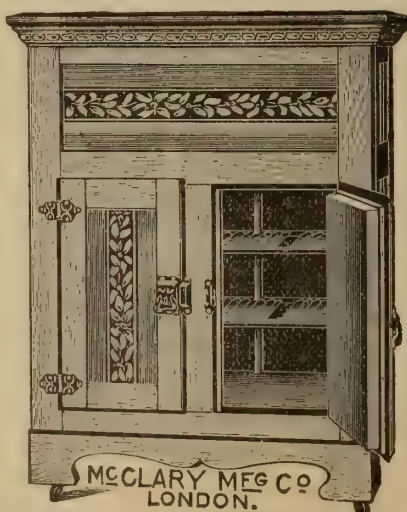
FIREBRICKS—There has been a good demand for firebricks at prices ranging from \$16 to \$21 per 1,000, as to brand.

METALS.

The possibility of the labor troubles in the States affecting the price of heavy material is the only new feature. Makers, in fact, have advanced their basis for large contracts on wrought iron pipe, and pig iron has a firmer tendency. The only other change has been a firmer disposition in ingot tin, which is advancing at primary points.

PIG IRON—There is a firmer disposition in pig, and firmer prices have been asked in the case of round lots of Hamilton brands. We quote: Hamilton, \$15.50 for No. 1, and

A GOOD Refrigerator



is a comfort while a poor one is not worth house room. We guarantee ours satisfactory.

Made of seasoned hardwood strongly put together and handsomely carved. Zinc lined and charcoal sheathed. Bronze locks and hinges, strong and of unique design. Ice racks and provision shelves strong and serviceable. Entire refrigerator easily cleaned.

The system of circulation, ventilation and insulation ensure a pure, dry, cold air.

Seven different sizes, with ice capacities from 25 lbs. to 180 lbs.

We have also a small quantity 1895 patterns, family size, which we will sacrifice at \$12.00 each.

The McCLARY MANUFACTURING CO.

London Toronto Montreal
Winnipeg Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST
AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in
all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman 403 St. Paul St.
Sporting Goods Co.

MONTREAL

\$14.50 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$17 to \$18; Carron, \$17 to \$18; Ayrson, No. 1, \$16; Eglington, \$16 to \$16.50; and Carnbro', \$16 to \$16.50.

BAR IRON—There has been quite an enquiry for bar iron during the week. Values continue steady at \$1 35 to \$1.45.

BAND IRON—Unchanged, as quoted last week, at \$1.65.

HOOP IRON—There is little doing in hoop iron, which we quote at \$2.25.

SHEET STEEL—Remains as last quoted, on the basis of \$2.35.

SHEET IRON—Some enquiry is noted at the decline—\$2.25.

GALVANIZED IRON—In a jobbing way there has been some movement at \$4 to \$4.25.

TINNED IRON—Without change at \$5.50 up to 20 gauge.

LEAD PIPE—Moving in a jobbing way at 7 to 7½c., with 30 and 5 off.

PIG LEAD—Steadily held at \$3.35 to \$3.50, with demand light.

INGOT TIN—Values have advanced ½ to 1c. under light stocks and stronger advices from abroad, and we quote 16 to 16½c.

INGOT COPPER—Remains as last reported, at 12 to 12½c.

SHEET COPPER—Jobbing out unchanged at 14½ to 16c.

CANADA PLATES—Quiet and steady at the decline—\$2.25 to \$2.30.

TIN PLATES—Are not by any means well assorted on spot, and prices are firm in consequence. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I.X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—These are very difficult to get, and brokers with commissions to buy them this week were unable to execute the orders. Ten and twenty box lots are held firm at \$6.

BOILER PLATE—Remains steady at \$1.90 to \$2.

SOLDER—Quiet at \$5 to \$5.25.

SPELTER—Unchanged at \$4.50 to \$4.75, with demand quiet.

ANTIMONY—Without new feature, at 9½ to 10c.

SCRAP IRON—Car lots are offering at \$12 for No. 1, and \$6 to \$7 for No. 2.

IRON PIPE—Values on iron pipe up to a week ago were very unsettled in this market, but last week the withdrawal of quotations by manufacturers has imparted a steadier tone to values. No actual change has been made by jobbers, but they are paying more for their supplies than before, and consequently are less disposed to cut prices. We quote per 100 feet net: Wrought, ¼ to ¾ inch, \$1.87; ½ inch, \$2.10; ¾ inch, \$2.45; 1 inch, \$3.40; 1¼ inch, \$4.50; 1½ inch,

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Rhode Island Pattern Horseshoes.

Korrek Shape. Quality Guaranteed.

AND FACTORIES
MONTREAL

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

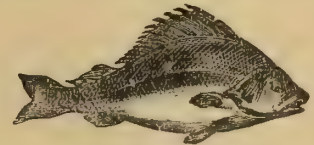
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION
HAMMOCK MANUFACTURING CO., Paris, Ont.

\$5.87; 2 inch, \$7.87; galvanized, $\frac{1}{2}$ inch, 4c.; $\frac{3}{4}$ inch, 4 $\frac{3}{4}$ c.; 1 inch, 6 $\frac{3}{4}$ c.; 1 $\frac{1}{4}$ inch, 10 $\frac{1}{4}$ c.; 1 $\frac{1}{2}$ inch, 11 $\frac{1}{2}$ c.

PAINTS AND OILS.

The feature of the past week has been a very active demand for Paris green, which has depleted the stocks of most jobbers. No actual scarcity is yet reported, however, but should the demand continue, some advance in price is not unlikely. The feeling in lead continues very strong, but none of the makers appear to have taken any action to advance prices, as we are still quoted the same figures. A further advance of 5s. per ton in dry is quoted by the European manufacturers. Business is somewhat quiet, but there is still a fair movement in general paints and colors.

WHITE LEAD—In good demand and firm at former prices, viz., Government standard, \$5; No. 1, \$4.62 $\frac{1}{2}$; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—As before, at 4c. in casks and 4 $\frac{1}{4}$ c. in kegs.

LIQUID PAINTS—Unchanged.

SHELLAC—Firm in tone, but demand moderate; case lots, 25c.

PARIS GREEN—Active. Drums 13 $\frac{1}{2}$ c., packets 14 $\frac{1}{2}$ c.

LINSEED OIL—Quiet, with full stocks. For raw we quote 41c., boiled, 44c.; 5-bbl. lots, 1c. less.

TURPENTINE—Decidedly easier. Quotations nominally 42c. in single bbls., larger lots, 41c.

VARNISHES—Without change.

SEAL OIL—New seal oil in a jobbing way is selling at 42 to 44c.

COD OIL—Quiet at 31c.

NAVAL STORES—Steady. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4 $\frac{1}{2}$ to 5c $\frac{1}{2}$. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

The window glass market is much firmer in consequence of higher markets abroad. Jobbers have advanced their figures 5 to 10c. this week, and we now quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

There has been no change in ashes. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

Continue quiet. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67 $\frac{1}{2}$ to 72 $\frac{1}{2}$ c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper,

\$4.37 $\frac{1}{2}$ to \$4.62 $\frac{1}{2}$; white sugar of lead, 7 $\frac{1}{2}$ to 8 $\frac{1}{4}$ c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

The hide market is stronger, and prices have advanced to 8c. for No. 1; 7c. for No. 2, and 6c. for No. 3.

PETROLEUM.

Steady and unchanged. We quote: Canadian, in car lots, 13 $\frac{1}{2}$ c.; smaller quantities, 14 $\frac{1}{2}$ c.; American prime white, car lots, 17c.; smaller 18c.; water white, car lots, 18 $\frac{1}{2}$ c.; smaller, 19 $\frac{1}{2}$ c.; Pratt's astral, car lots, 20 $\frac{1}{2}$ c., and smaller, 21 $\frac{1}{2}$ c.

COAL.

Quiet and steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Arrivals of cement have been 500 casks English, also 60,287 firebricks.

In sympathy with foreign advices prices on ingot tin have been advanced $\frac{1}{2}$ to 1c. per lb.

Cables from Belgium received here this week quote an advance of 4 points in the price of window glass.

Cables quote a further advance of 5 shillings per ton in dry lead at European manufacturing centres.

Brokers complain that it is almost impossible to execute buying orders for terne plates, which are very scarce.

Firmer prices are asked this week for round lots of Hamilton pig iron, though the regular jobbing quotation is unchanged.

Window glass has been marked up here by jobbers 5c. on first break and 10c. on each additional break, owing to firmer markets abroad.

Caverhill, Learmont & Co. are putting a new line of horse rasps on the market called the X.L.C. These are American manufacture, and are fully guaranteed as to finish and quality.

Caverhill, Learmont & Co. are offering a fine line of skates in addition to last year's

styles. They have added the "Jubilee" and "Victoria" hockey skates. Owing to the big shortage of skates last season they would urge the trade to book their orders as early as possible.

ONTARIO MARKETS.

TORONTO, July 23, 1897.

HARDWARE.

TRADE in general has a healthy tone.

Jobbers, as a rule, have been busy during the week, both in general hardware and tinware, but particularly in harvest tools. In heavy hardware it can hardly be said that trade was as good as anticipated. It must be borne in mind that when the change in cut and wire nails and in other heavy hardware took place a great many dealers throughout the country purchased largely in excess of their immediate requirements. While some of the dealers did not expect paris green to be called for to any extent, we find that there has been a good demand during the past week. Binder twine orders have all been completed now, and some manufacturers have exhausted the season's supplies. Iron pipe has advanced.

BARB WIRE—There has been very little doing, due to the fact that farmers are busy harvesting. We quote: \$2.20 f.o.b. Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

WIRE—Has been very quiet for the same reason. Discounts, 35 per cent. off the list. Terms, 4 months, or 3 per cent. off 30 days.

WIRE NAILS—Show a decided improvement in demand. There is no change in price. We quote base price at \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—Also are in increased demand. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade maintains a steady tone. The discount remains at 50 per cent.

HORSESHOES—Orders are coming in very freely; an improvement is reported. We

Binder Twine.

HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

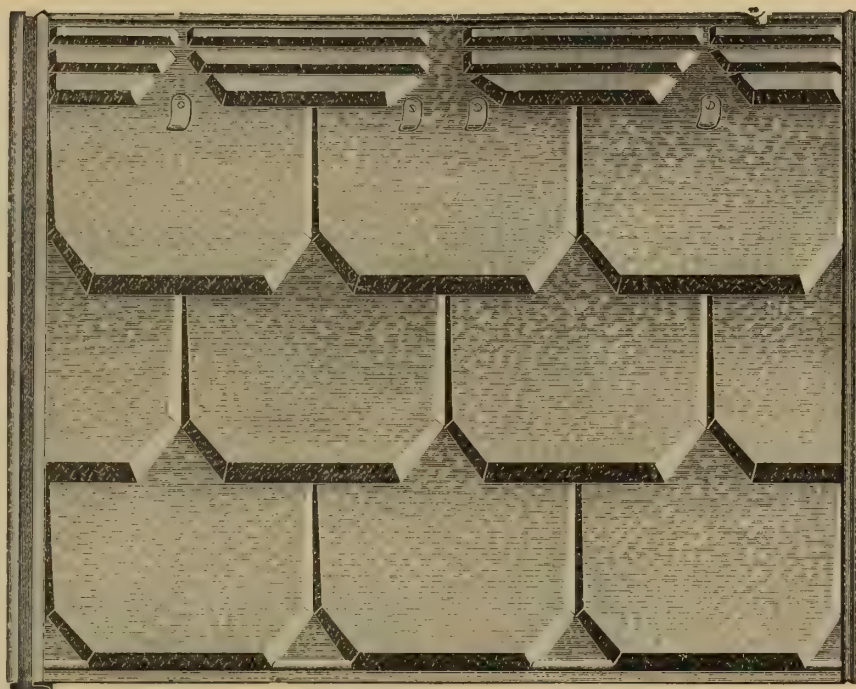
PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

The "Eastlake" Patent Shingle

The only original shingle fastened with a cleat and having a telescopic side lock and concealed water gutter.

Beware of Cheap Imitations.



The Eastlake Shingles are made from Galvanized or . . . Painted Steel of the

Finest Quality Only.

SHOWS ONE SHINGLE.

IMPORTANT INFORMATION



When you purchase a bushel of wheat you expect to get 60 lbs., no matter what grade it is, because that is the standard weight fixed by law. There is no law saying what metallic shingles shall weigh, and the only safe rule is to demand from manufacturers of these goods a list of weights, and see that goods you buy fully come up to this.

If one maker sells you goods guaranteed to weigh 80 lbs. at \$3.20 per square, that is 4c. per lb.; if some one else offers you goods claimed to be "just the same" at \$3.00 per square, his goods may only weigh 70 lbs., and this at the same rate (4c. a lb.) should only make the price \$2.80 per square. Thus the shingles claimed to be "just the same" are 20 cents per square higher than the guaranteed goods, made by an honest maker, out of honest materials, by honest workmen.

MORAL: Deal only with honest, reliable makers, who have some reputation and capital at stake.

We believe that constant attempts are being made to deceive the public who do not happen to be judges of the various roofing and siding plates made by different makers, and we therefore wish to point out to you that the **APPROXIMATE AVERAGE WEIGHTS** of the goods made by us are as follows, EXCLUSIVE OF THE PACKAGES:—

**THE BEST
IS THE
CHEAPEST**

GALVANIZED "EASTLAKE" SHINGLES.

No. 1 grade, 105 lbs. per square.
No. 2 " 94 " "
No. 3 " 82 " "

PAINTED "EASTLAKE" SHINGLES.

No. 1 grade, 93 lbs. per square.
No. 2 " 83 " "
No. 3 " 70 " "

**THE BEST
IS THE
CHEAPEST**

BRICK OR MANITOBA SIDING PLATE.

No. 1 grade, 77 lbs. per square.
No. 2 " 68 " "
No. 3 " 57 " "

All the Above Weights are Exclusive of the Packages.

We do not guarantee that all sheets are of exactly the same thickness, as it is impossible to supply all sheets exactly alike; the above weights are, however, the approximate average weight per square, so that you see exactly what we are offering you, **QUALITY, WEIGHT AND SUPERIOR CONSTRUCTION** being our first consideration. We do not aim at selling the lowest priced goods in the market, but do aim at selling the **BEST**.

Kindly take the above facts into your consideration.

We are the original makers of metallic goods in Canada, and make and sell more than all others combined.

If you want to know why, write us and we will tell you.

The Metallic Roofing Co. of Canada, Limited

Cor. King and Dufferin Sts.

TORONTO, ONT.

quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Trade is brisk. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Business is quiet. Discounts are 12½ per cent.

BOLTS—Trade in this line is very brisk, carriage, tire and stove bolts particularly. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ¾ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

BRASS BUTTS—Demand is active. Discounts are 17½ per cent.

RIVETS AND BURRS—Trade is quite good. The demand is principally for coppered, but the orders for tinned are increasing. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

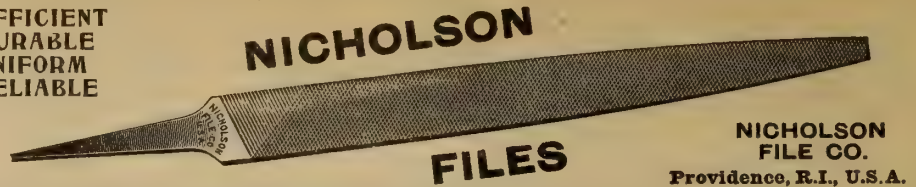
ROPE—Trade in certain sizes for hay fork pulleys is good. The demand in these lines has exceeded the supply. We quote as follows: Sisal, 7-16 in. and larger, 5⅜c.; ¾ in., 5⅜c.; ¼ and 5-16 in., 6⅜c.; 3-16 in., 6⅜c. Manilla, 7-16 in. and larger, 7⅜c.; ¾ in., 7⅜c.; ¼ and 5-16 in., 8⅜c.; 3-16 in., 8⅜c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Trade is falling off in this line. Not many orders are coming in as stocks are all supplied. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Trade continues to have a fairly good tone. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—There has been no change in volume reported. Business has been keeping up well. Dealers say it has been much better than for years. The diffi-

**EFFICIENT
DURABLE
UNIFORM
RELIABLE**



**NICHOLSON
FILE CO.
Providence, R.I., U.S.A.**



Guaranteed to be the Best Preservative of Metals. Not Vaseline. Will retain its form in any climate. Not affected by heat or cold. Will NOT grow RANCID. Least required to coat work thoroughly. Use it to protect your tools. Largest Tube and Best Quality. A Superior Lubricant for Bicycle Chains and Metals. Write regarding this or the best Repeating Rifles to

THE MARLIN FIRE ARMS CO., New Haven, Conn., U.S.A.



To Whet a Scythe...

properly requires a good
Scythe Stone.

**Pike's BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively **Scythe Stones**
the best on earth.

Pike's Lilly White Washita OIL-STONE
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

culty to supply the demand for cradles, snaths and scythes continues. Discount is 60 and 10 per cent.

SPADES AND SHOVELS—Orders continue to arrive less freely. Discount is 45 per cent.

BUILDING PAPER—Trade continues to have a steady volume, with no further improvement. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—An increase in the number of orders has been experienced. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—Trade in both tinware and granite ware has been active. Orders are both large and numerous.

HINGES—Business is active, particularly in barn door hinges: We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35.

CUTLERY—Business remains about the same as it was a week ago. Small orders prevail.

SPORTING GOODS—It cannot be said that business in this line has shown any perceptible improvement.

SCREEN DOORS AND WINDOWS—The

situation has not altered during the week. Jobbers are still unable to complete orders.

POULTRY NETTING—Trade is on the decline. Discount, 67½ per cent.

GREEN WIRE CLOTH—Trade is steady. The idea as to price is \$1.35 per 100 square feet.

GARDEN HOSE—Although not so brisk as it has been, a good deal of hose is going out. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—Business still has the steady and firm tone that has prevailed all year. Although the wholesale price of English cements has advanced a few cents, the change has had no effect in the retail Toronto prices. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

PIG IRON—Trade has been very quiet. The advanced prices are very firm. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75

for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—Trade maintains its steady tone. We quote base price at \$1.40 in carload lots and \$1.50 in smaller quantities.

HOOP AND BAND IRON—Business is dull. We quote \$2.25 per 100 lbs.

SHEET STEEL—Has been in fair demand. There are no changes of any importance to announce. We quote as follows: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—A fair demand has characterized this line during the week. There is no quotable changes. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The improvement has been maintained. Prices remain firm as before. We quote: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, 3.75c.; 26, 4c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26

gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ½ to ¼c. per lb. higher than figures named.

TINNED IRON—Orders for heavy gauges continue frequent, while the lighter gauges, although moving somewhat, are not having as active a demand. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.13; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—The volume continues steady, with a satisfactory trade. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—Is moving more freely. Discount, 60 and 10 per cent.

PIG LEAD—While no large orders have been coming forward, trade has been better than for some time past. Prices remain the same, imported being quoted in ton lots at 3½c. per lb., and in smaller quantities at 3¾c. per lb.

INGOT TIN—Small lots only have been going out, and no large sales have been made. Prices are firm at 16¼ to 16½c. per lb.

SHEATHING COPPER, ETC.—The shipments from stock have been light. There has been a big run on braziers'. We quote as follows: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—The demand is fair, although no large sales are reported. An advance has taken place. We quote per 100 feet net: Wrought, ¼ to ¾-inch, \$1.87; ½-inch, \$2.13 to \$2.25; ¾-inch, \$2.63 to \$2.75; 1-inch, \$3.55 to \$3.65; 1¼-inch, \$4¾ to \$4.75; 1½-inch, \$6 to \$6.12½; 2-inch, \$8.12½ to \$8.25; Galvanized, ½-inch, 4c.; ¾-inch, 4¾c.; 1-inch, 6¾c.; 1¼-inch, 10¼c. 1½-inch, 11½c.

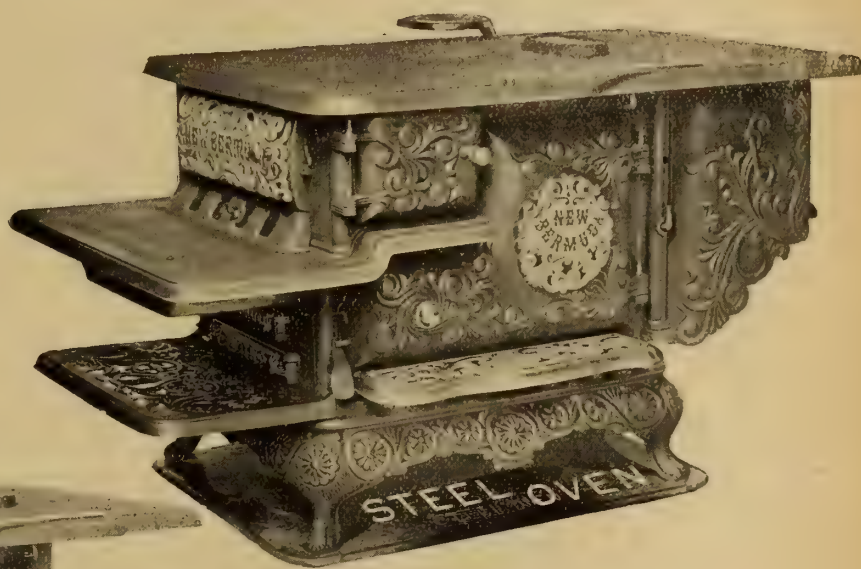
RANGE BOILERS—There is no change in trade or prices reported. We quote: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—The orders from stock are very small, while there are numerous

The ... New Bermuda

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



No. 926 Square and Reservoir
Takes 28-inch Wood.



The **NEW BERMUDA** possesses many features of utility and convenience not found in other Wood Cooks. Sold by all Stove Dealers.

Manufactured by...

The D. MOORE CO. Limited
HAMILTON, CANADA

import sales. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$3.

TIN PLATES—There are no special features to report. The only thing that can be said is that there is a steady trade. Fall orders are now a little more numerous. Prices are firm. We quote as follows: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Business is still brisk. We quote: $\frac{1}{4}$ in., $\frac{1}{2}$ c.: $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Business is steady. We quote: Imported, $\frac{5}{8}$ c. in ton lots, and $\frac{5}{8}$ c. in smaller quantities.

TERNE PLATES—Only a few enquiries have been received during the week. We quote: I C, \$6.25 to \$6.50; I X, \$8.

SOLDER—Trade is still fair. We quote: Standard, $10\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Is moving a little more freely. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

There is a fair quantity of glass moving. Quite a percentage of the demand is for double diamond, although single and star is also called for freely. Prices are firm at the figures quoted. We quote window glass: First break in 50-foot boxes, \$1.20 to \$1.25, and in 100-foot boxes, \$2.30 to \$2.40, Toronto, Hamilton and London.

OLD MATERIAL.

There is only about one quarter of the scrap iron coming forward that there was before the introduction of the present tariff. Prices are so low that they now do not warrant a living for pedlars. We have learned that pedlars have turned their energies in some other direction. There is a fair demand for woolen rags, while paper stock rags are dull. Final shipments of rags are being made to the States. In England there has been a sharp advance in copper, spelter, and lead. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb.; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

PAINTS AND OILS.

Nearly all the travelers are now in, and as a consequence trade has fallen off considerably during the week. Turpentine has advanced 1c. in the South, and is a little firmer here. There is still a fair call for it.

Duplicate sales of paris green have been very good this week. Linseed oil is steady. Dealers differ in opinion as to the probability of an early rise.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77 $\frac{1}{2}$; No. 2, \$4.40; No. 3, \$4.02 $\frac{1}{2}$; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—\$1.90 per barrel.

CASTOR OIL—In cases, $8\frac{1}{2}$ c. per lb. and 9c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12 $\frac{1}{2}$ -lb. tins, 8 in case, \$2.45.

PARIS GREEN—Kegs, 13c.; drums, 13 $\frac{1}{2}$ c.; 1-lb. cartoons, 14c.; $\frac{1}{2}$ -lb. packages, 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 43c.; 5 to 9 barrels, 42c.; Boiled, 1 to 4 barrels, 46c.; 5 to 9 barrels, 45c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. There has been some cutting in turpentine revealed.

HIDES, SKINS AND WOOL.

HIDES—Trade is quite brisk. Cowhides: Dealers pay $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3. Steerhides: 60 lbs. and up, $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3.

CALFSKINS—Trade is brisk and prices are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins, 50c.; pelts, 30c.

WOOL—The trade in wool is now dull,

owing to all of the clip having gone out of the country to the States. There is almost nothing doing. The dealers are now paying 19 to 20c.

PETROLEUM, ETC.

The demand for lubricating oils continues on the increase, in spite of the fact that stocks were well filled. The trade in petroleum has now assumed its summer dull tone. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, $14\frac{1}{2}$ c.; carbon, safety, $16\frac{1}{2}$ c.; Canadian water white, 17c.; American water white, $17\frac{1}{2}$ c.; Pratt's astral, 17c. in bulk.

COAL.

Trade is much about the same as it was a week ago. Anthracite is quoted at Buffalo and bridges: Grate, \$4.27; egg, \$4.50; stove, \$4.50; chestnut, \$4.50.

MANITOBA MARKETS.

WINNIPEG, July 20, 1897.

THE Industrial Exhibition opened here to-day. Until a late hour last night exhibits were not in position, so that any idea of the hardware display must wait until next week's issue. The crowd in the city is enormous, and more are coming in by every train. Unfortunately, to-day is wet, and a wet day in Winnipeg is a thing not to be desired or lightly forgotten, more especially when there is a crowd. Prices have not moved since last week. Binder twine is now being shipped out, but these purchases were almost all made some time ago, and have occasioned no special activity.

WIRE—Galvanized barb wire, \$2.65 to \$2.85 100 lbs.; plain wire and staples, \$2.75 to \$2.80.

ROPE—Sisal, lb., $6\frac{1}{4}$ to $6\frac{1}{2}$ c. base; manilla, lb., $7\frac{3}{4}$ to 8c. base; cotton, $\frac{1}{4}$ to $\frac{1}{2}$ inch and larger, 16c. lb.

AXES—Per box, \$6 to \$9.

NAILS—Cut, keg, base price, \$2.50 for 20 to 60d., with new classification of extras; common steel wire nails, $4\frac{1}{2}$ to 6 inch, \$2.65 per keg, with usual extras for smaller sizes.

HORSE NAILS—Pointed and finished oval heads. List price as follows: No. 5, \$7.50 box; No. 6, \$6.75 box; No. 7, \$6 box; No. 8, \$5.75 box; Nos. 9, 10 and 11, \$5.50 box. Discount off above list price 45 per cent.

TIN—Lamb and Flag, 55 and 28 lb. ingots, per lb., 19 to 20c.

TIN PLATES—Charcoal plates, I. C., 10 x 14, 12 x 12 and 14 x 20, \$4.50 to

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Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

\$4.75; I.X., same size box, \$5.75 to \$6; I.C. charcoal, 20 x 28, 112 sheets to box, \$8.50 to \$9; I.X., box 20 x 28, 112 sheets, \$10.50 to \$11.

TERNE PLATES—I.C., 20 x 28, \$8.50 to \$9.

IRON AND STEEL—Bar iron, 100 lbs., base price, \$2.15 to \$2.25; band iron, 100 lbs., \$2.65 to \$2.75; Swedish iron, 100 lbs., \$5.25 to \$6; sleigh shoe steel, \$3 to \$3.25; best cast tool steel, lb., 9 to 11c.; Russian sheet, lb., 12 to 13c.

SHEET IRON—10 to 20 gauge, \$3.; 22 to 24 and 26 gauge, \$3.25; 28 gauge, \$3.50.

CANADA PLATES—Garth and Blaina, \$3.15.

GALVANIZED IRON—American, 20 gauge, \$4; 22 and 24 gauge, \$4.25; 26 gauge, \$4.50; 28 gauge, \$4.75 100 lbs.

IRON PIPE—Is quoted as follows per 100 feet: $\frac{1}{4}$ -inch, \$2.50; $\frac{3}{8}$ -inch, \$2.75; $\frac{1}{2}$ -inch, \$3; $\frac{3}{4}$ -inch, \$4; 1-inch, \$5; $1\frac{1}{4}$ -inch, \$7; $1\frac{1}{2}$ -inch, \$8.50; 2-inch, \$11.50.

LEAD—Pig, per lb., $4\frac{1}{2}$ c.

SHEET ZINC—In casks, \$5.65, broken lots, \$6.

SOLDER—Half-and-hal (guar.) per lb.; 14 to 16c.

AMMUNITION—Cartridges, rim fire pistol, American, discount 40 per cent.; rim fire cartridges, Dominion, 50 and 5; rim fire military, American, net list; central fire pistol and rifle, American, 12 per cent.; central fire cartridge, Dominion, 30 per cent.; shot shells, 12 gauge, \$6 to \$7.50; shot, Canadian, soft, $5\frac{1}{2}$ c.; shot, Canadian, chilled, 6c. Robin Hood powder, 17-lb. kegs, \$10; $\frac{1}{4}$ kegs, $4\frac{1}{4}$ lbs., \$3; canister, 9-oz., 60c. Loaded shells, 12 gauge, soft shot, \$18 per 1,000; No. 10 gauge, \$20.70 per 1,000.

PAINTS, OILS AND GLASS.

WHITE LEAD—Pure, \$5.75 per 100 lbs.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, $5\frac{1}{2}$ c.; yellow ochre, in barrel lots, $2\frac{1}{2}$ c.; less than barrels, 3c.; golden ochre, barrels, $3\frac{1}{2}$ c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, $3\frac{1}{2}$ c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, $2\frac{1}{2}$ c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, $4\frac{1}{2}$ c. per lb.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown Japan, \$1; house-painters' gold size, Japan, \$1.50; coach painters' do., \$2 to \$2.25; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

SUNDRIES—Glue, S. S., in sheets, per lb., $12\frac{1}{2}$ to 15c.; glue, white, for kalsomin-

ing, 16 to 25c.; stove gasoline, per case, \$4; benzine, per case, \$4. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$7. Portland cement, per barrel, \$4 to \$4.25; plaster, per barrel, \$3.25; plasterers' hair, P.P., 90c. per bale. Putty, in bladders, barrel lots, $2\frac{1}{2}$ c. per lb.; do., in 100 lb. kegs, $2\frac{3}{4}$ c.; do., less than barrels, per lb., 3c. Alabastine, cases of 20 pkgs., \$6.50 to \$7.50, as to color.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

LINSEED OIL—Raw, gal., 50c.; boiled, gal., 53c. in barrels; less than barrels, 5c. gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, 55c.; less than barrels, gallon, 58c. An additional charge for packages for small quantities.

OILS—Range about as follows: Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 11c. per lb.; tanners' or harness oil, 65c.; neatsfoot oil, \$1; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

REFINED PETROLEUM—Prices here are as follows: Silver Star, $18\frac{1}{2}$ c.; Crescent, $22\frac{1}{2}$ c.; oleophene, $23\frac{1}{2}$ c. in barrels. Car lots, 1c. per gal. less. United States oils in barrels are quoted at 27c. for eocene and 24c. for sunlight.

THE SELF-PROVING ACCOUNTING SYSTEM.

"TWO leading considerations are to be kept in mind when examining accounting appliances and methods. One is the relationship of each individual element to the system as a whole, and the other the convenience and efficiency of the device in itself for the special purpose for which it is intended. The first of these is determined by the system itself, or the principles upon which the system is based, and the second by the features of the devices and their adaptability to the ends in view." It is with these words that the editors, J. F. Brown, Toronto, and A. O. Kittredge, New York, commence their work entitled "The Self-Proving Accounting System," and it is on these principles that they claim that this system is the best ever offered to the public.

The self-proving accounting system is a double entry system and may be characterized as double entry brought down to date and adapted to modern requirements. It is more than double entry, for, in addition to each transaction being represented in two accounts, one showing the debit and the other the credit, each account is twice entered, once as an individual element and once as a part of a group, or one of a number of elements taken collectively.

Another advantage of the system is its utility. According to the size of the business, one or twenty clerks may be employed in recording the different classes of transactions, and, when an error is found, the mistake may easily be rectified by comparing the books of the different employees.

The leading contention in the treatise is that the ledger of a business may be so constructed, and the accounts therein so classified and arranged, that it shall at all times be a going balance sheet of the business, not only with respect to resources and liabilities, but also in the matter of profits and losses. This is not a mere theoretical deduction, for the plan outlined in the volume is in successful use in many places at the present time.

The work is a credit to the publishers, the Self-Proving Account Book Co., who have an office in Toronto at 3 and 5 Queen street east. It contains some 328 large pages and is handsomely and substantially cloth-bound.

STINGY.

The genuine miser usually devotes more energy to keep his money than would suffice to make several fortunes, says an exchange. It cannot be that the expenditure of force is balanced by the personal satisfaction derived from success. Many stories are in circulation illustrating the stinginess of a certain farmer.

He one day went into a store to buy six feet of rope, and the dealer, knowing his peculiar love for money, told him he might have it for ten cents.

"I'll give you five."

"I can't sell it for that. Why, man, you've got plenty of money, and ought not to grumble."

"Yes, but times are powerful hard. Can't stand that price."

He went away, and after remaining about two hours came back to ask:

"That rope fell any?"

"No."

"Good."

The next day he entered the store and said:

"I hear rope is fallin' all over the country."

"That so?"

"Yes. Hear that over at Cotton Town ye can git ten feet for a nickel."

"Why don't you go over there?"

"Don't want to wear out my shoes. Say, has it fell any here?"

"Not a cent."

"Wall, good-bye."

Two days later he came back.

"Say," he said, "hain't you got some old rope you can sell cheap?"

"No old rope."

"New rope ain't fell none yet?"

The dealer, worn out by the siege, offered him the required quantity for five cents. The old man carefully measured it, and said, with a disappointed air:

"It's three inches short. Can't you knock off something?"

"Yes; give me four cents."

"Say three."

"Well, three."

The purchaser laid three somewhat dirty one-cent postage stamps upon the counter and hurried away, to leave the shopman no time for repentance.

Plumber and Steam-Fitter

PLUMBERS' REGISTRATION BILL.

UNLESS the unexpected happens, this bill, that has been before the British House of Commons, and which we explained last week, is dead for the present session. In regard to it The Hardware Trade Journal says, in its latest issue, under the title of "Ironmongers and the Plumbers' Registration Bill":

"The determined opposition which ironmongers, through their representatives in the House of Commons, brought to bear against the passage of the Plumbers' Registration Bill has been rewarded with signal success. In its original form the bill was framed with a view of excluding from its benefits any master ironmongers who had added to their business the important branch of sanitary plumbing or journeymen, providing they were not in a position to pass a practical and theoretical examination before a committee of the Plumbers' Company. Now, no one who has an intelligent knowledge of the plumbing trade and the way the work has been carried out in many instances, by all sorts and conditions of men, can deny that some scheme was required which would enable the public to distinguish between the botching tinker and the qualified plumber. But it does not necessarily follow that, because a tradesman calls himself a plumber, or that he can show a fairly long record as an employer of plumbers, he is qualified to carry out plumbing work, and in a more reliable manner than his fellow-tradesman who does not aspire to a more distinguished title than an ironmonger.

"If, indeed, the previous experience of the great majority of those who profess to be master plumbers, or, more correctly, masters of plumbers, were inquired into it would be found that only comparatively few could show any more right to be registered as master plumbers than the ironmongers who were to have been absolutely excluded from the register. Whether the ironmongers would have lost anything worth considering if the bill had passed in its original form is a question upon which there seems to be some doubt; in fact, after more than ten years of registration it is somewhat difficult to define the advantages of being either a registered master or journeyman plumber, and in some places there is a certain amount of stigma attached to it, especially where

men who have become registered are so deplorable as mechanics that the thoroughly competent men have treated the matter with contempt.

"It is, however, not so much at the present conditions of affairs that we must look, as the influence the movement is likely to have on the future interests of the trade. And as ironmongers are evidently destined to control a very large portion of the plumbing work in this country, it is incumbent on them to see that their just rights are not jeopardised by Acts of Parliament, which in years to come may prove a great hindrance to legitimate trading.

"And now that ironmongers are to be included in the General Council, and are therefore to be duly represented in the deliberations of the Registration Committees, it is very significant that the bill, which, in the first instance, seemed to have no chance of passing, is now going through the various stages without much opposition. It is also worthy of notice that at the annual meeting of the National Association of Master Plumbers, from whom one would expect to hear the greatest objection to ironmongers being included in the bill, although some attempt was made to decry the bill on this account, the arguments were necessarily very feeble, and the resolution approving of the Plumbers' Registration Bill was adopted with only one dissident. One speaker at the above meeting who hails from Birmingham stated that 'he did not want to say anything against London, but he was heartily ashamed of the metropolis.' What had he seen? In Holborn that morning he saw all kinds of trades advertised on shop fronts, and he found an undertaker calling himself a 'sanitary engineer and plumber,' and another a 'window cleaner and sanitary en-

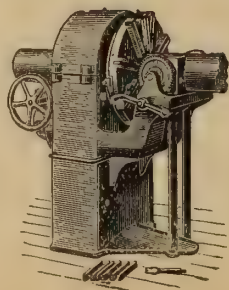
gineer.' He had several business transactions with London, but he never dreamt that in some of the outlying streets the trade was carried on by tin-smiths, undertakers and window cleaners. If this gentleman had pursued his investigations still further he would have discovered that the title of 'sanitary engineer' is appropriated by a far more numerous and otherwise nondescript class of enterprisers. For chimney sweeps have realized the fact that the use of their sweeping machines to unstop drains has developed them into sanitary engineers, and has thus encouraged them to undertake to improve upon the mistaken ideas of the builders and plumbers by putting things right. There is, therefore, plenty of scope for the opposition party in various directions, without interfering with ironmongers' plumbing work, most of which will compare favorably with that which is being carried out by those who lay claim exclusively to the title of master or journeyman plumber."

Perhaps the Plumbers' Company may, in the interval before the next session of Parliament, employ some time in considering whether such modifications cannot be introduced into the measure as will fully reconcile conflicting interests, and particularly in the direction of modifying the cumbrous general council. It must be evident that, in its present form, the bill will never pass.

PATENTS GRANTED TO CANADIAN INVENTORS IN THE UNITED STATES.

Below will be found the only complete report of patents granted this week by the United States to Canadian inventors. This report is specially prepared for our paper by

Armstrong Pipe Threading AND CUTTING-OFF MACHINES (Hand or Power.)



Armstrong Adjustable Stocks and Dies,
Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

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FOR HAND OR POWER.

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OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

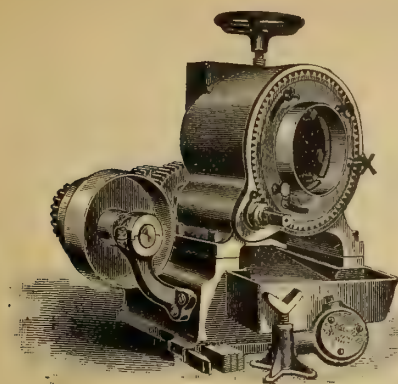
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills.

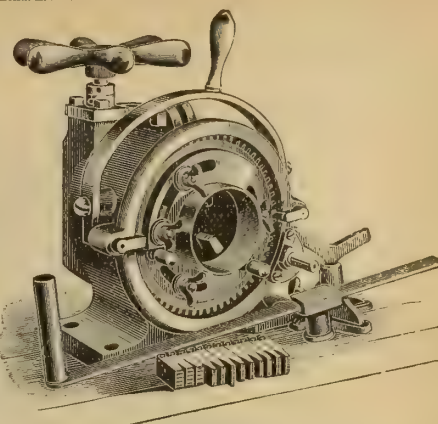
Ratchet Die Stocks.

Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.: Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.
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Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

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CANFIELD'S MOULDED RUBBER GOODS

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GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL
RUBBER
GOODS

H. O. CANFIELD - BRIDGEPORT, CT.

MOULDED
RUBBER
GOODS

Messrs. Marion & Marion, solicitors of patents, 185 St. James street, Montreal:

584,535—Boiler water regulator, U. S. Archer.

584,472—Gas apparatus, H. A. Jones.

584,527—Gas burner, V. H. Slinack.

584,674—Gas engine, E. B. Dake.

584,448—Gas engine, C. C. Wright and W. J. Stephens.

584,475—Gas saving check, A. Kuhne.

584,729—Refrigerator car ventilator, F. E. Monteverde.

584,425—Sanitary closet, T. F. Strachan, Jr.

584,736—Sewage disposal apparatus, W. F. Goodhue.

584,508—Sewer cleaning tool, J. S. Hughes.

584,754—Machine for soldering end pieces on cans, J. A. Booth.

511,608—Stove for burning hydrocarbon oil and its vapors, H. Ruppel.

584,569—Burner for oil vapor stoves, G. Washington.

584,394—Water circulator and heater, J. H. McDonald.

584,682—Water plug, H. H. Garrison.

584,439—Tool for turning well-rod joints, J. H. Woehl.

Cusson & Galarneau plumbers, Montreal, have dissolved.

THRILLING RESCUE OF A PLUMBER.

THE Plumbers' Trade Journal of New York contains a thrilling account of the accident whereby a plumber named Frank Jones of that city narrowly escaped being buried alive, brief mention of which was made in the press despatches.

Jones, with two other journeyman plumbers, who were employed by L. J. Euvrard, of 74 Spring street, went down into a ditch running from the foundation walls of the house to the water and gas mains in the street to connect with these mains the pipes of a new six-storey tenement that is being built at 27 Henry street. The ditch was about fifteen feet long and three or four feet wide. He was at work on a joint of the pipe when the sides of the bank about him closed in. He was near the wall of the house. The sand and gravel which fell on Jones threw him into a half-crouching attitude, and as more poured in from both sides he was gradually forced down until he lay on his side.

The efforts of the two men in the excavation, who went to his assistance as soon as they heard his cries, only caused more of the sand to be loosened, and a moment after the first fall of it he was buried up to his chin. The sand continued to fall, and it looked as though he would be buried before help could be brought. Other work-

men in the building climbed down to where he lay, but it was impossible to move him.

When they saw that the rescue was beyond their power, a special fire alarm was sent in, and the firemen started to shore up the walls of the hole. The sidewalk was torn up, and as the sand continued to fall, a respirator was dropped down to Jones and attached to a long rubber tube which was brought up to the sidewalk. He held this with one hand, which had been freed by the men at work, and he never for a moment lost his pluck.

The area wall was partly taken down, and the sidewalk was torn up for twenty feet in order that the walls of the trench might be sloped down. Through a hole in the area wall a plank was put under Jones' stomach. Some of the sand about him was removed in this way, but when an effort to pull him out was finally made, it was found that his left leg was stuck fast in the sand. As the men dug around Jones they placed boards under his body.

Once as they were stooping forward to lift him from the hole a mass of sand fell over him again, and he was buried up to his waist again. A second time, just before the rescue, as the men were about to pull the plumber out of the dirt, another fall of sand and gravel compelled them to start the work anew. With his one arm free he held

the respirator to his mouth in case a sudden fall of sand might cover his head, and he removed this only to give the men orders. The sand about him was so insecure that the work of rescue was made doubly difficult and several men were overcome by the heat. P. J. Hanlon, the contractor of the building, was so much excited by the accident that he had to be removed to Gouverneur Hospital, and L. J. Euvrard, the plumber who had employed Jones, was so affected that he was unable to take any hand in the rescue.

It was at about 9.20 o'clock that his fellow workmen heard Jones call for help, and at 12.25 he appeared at the top of the shaft. The crowd shouted, the plumber grinned, and his companions rushed up to congratulate him. Jones, who is only 19 years old, sat in a neighboring barber shop after he was rescued and wiped the sand out of his eyes.

THE HUSTLER, THE BUSTLER AND THE PLODDER.

THE many grades of men and boys in business may all be classed under the heads named above, writes L.M.N. in Iron Age.

The hustler has, by common consent, become the universal favorite. We hear him praised everywhere—on the road, around the store, as buyer, in the office.

The coveted honor which is his by right is eagerly sought by those who are not entitled to it. We admire the true hustler, but the one who appears to be one is soon found out—finds his true level.

The hustler's first requisite is thoroughness. He goes to the bottom of everything. He leaves no stone unturned. If he is a traveler he will sell goods; and when he fails to sell he finds out the reason of his failure. And the knowledge thus gained adds potency to his already well-trained forces. He is a stickler for knowing the whys and the hows, and when he knows them he uses them to the best advantage.

He insists on doing everything in the best manner. But perhaps his best known and most apparent quality is his speed. He must not only do things in the right way, at the right time, in the most thorough manner, but he must do things now; and must complete it as soon as expediency will warrant.

Never was speed more appreciated than at the present day. The hustler, knowing this, and also on account of his energy and force, pushes a work commenced to its speedy close. Consequently he is always in demand and will always obtain just recognition.

Following close at the hustler's heels is the plodder. And alas, he is far too uncommon at the present day. Men fail to realize that

downright hard and exacting work lies at the root of all genuine success, and they point with scorn at him who, though slowly, at the same time is surely laying the foundations of future success.

He is not appreciated as he should be, for though slow in his movements and ideas, he generally does an appointed duty well, even if it takes a long time. But his persistence is a talent of great worth, and by practice speed will come, and in time he may develop into a hustler, or earn success by his wise and persistent methods.

But of all the clerks in a store, deliver me from the hustler.

He desires to shine, to be in favor with "the boss," and in order to appear a genuine wonder, he makes much noise, and with a great flourish of trumpets acts as if the welfare of a nation hung upon his shoulders, and that disaster would overtake the establishment where he is employed were it not for him.

His first month in the store is his best; and his employer congratulates himself that he has captured a prize.

But he does not wear. He does not do half as much work as his more quiet fellow worker.

His glib tongue and filibustering haste soon become unbearable.

He generally soon tires of the routine of the store, and seeks employment where he may find greater scope for his talents.

A SHARP HARDWAREMAN.

"I went to Smith's hardware store fer an 8 x 10 window t'other day," said the kicker, as he borrowed a fresh chew and settled himself within easy shot of the box stove. "I wanted an 8 x 10 window cuz the' wouldn't no other size fit my house, an' I sez to Hank, sez I, 'How much be they?' 'One dollar,' sez he. 'Jumpin' Jeehossyphat!' sez I. 'Yer don't charge nothin' fer 'em!' sez I. 'What's the matter?' 'Glass is up,' sez he; 'way up skyhigh, glass is, an' we can't hardly get it fer love nor money. Guess yer don't keep posted on glass,' sez he. 'Waal, by gum!' sez I, 'can't be helped, I s'pose, an' I've gotter have it annyhow's.'

"So we went back inter the store, an' jes' then in come a feller with two coon hides an' a skunk. Hank, he grabbed 'em up an' slatted 'em down on the floor an' started off a whis'lin' like he'd forgot all 'bout 'em.

"'Hain't yer a goin' ter buy 'em?' asked the feller. 'Buy what?' sez Hank, turnin' raound kinder s'prised like. 'Why, these here skins,' says the feller. 'O, by gum!' sez Hank; 'I d'no. Furs is ter'ble low now. Market all gone ter h—I. Hole inter it bigger 'n a b'loon—skins hain't woth what they uster be.' 'What'll yer gimme fer 'em?' sez the feller, lookin' sorry. 'D'no's I want 'em at all,' sez Hank. 'Make me an offer,' sez the feller. 'They hain't no good to me.' 'Waal,' sez Hank, kinder slow an' hesitatin' like, 'I s'pose I might gin ye thirty cents fer 'em.'

"So the feller, he took it. Bought nails with it. An' nails had riz, so Hank said." —Michigan Tradesman.

PORTLAND CEMENTS

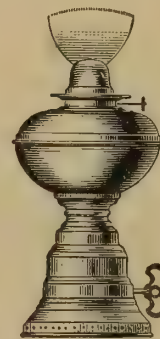
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SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices.

Ask For Our Quotations.

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Roasts Broils
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without impairing the light.

Several hours Lighting and Cooking for one cent. We want to reach the public through the trade. Liberal discounts. For prices and information write The

WANZER LAMP & MFG CO.
HAMILTON.

BOOKS FOR THE RETAILER

Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from HARDWARE AND METAL.

Necessary Books for a Retailer

By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

Any one of the above mailed for . . .

10 cents

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The MacLean Publishing Co.
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Binder Twine

Pure Manila 

650 ft. to the lb.



**BLUE RIBBON
BLUE CROWN
STANDARD**

**RED CAP
RED CROWN
WHITE SISAL**

For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.




Consumers
Cordage Co.

MONTREAL . . .

TRADE CHAT.

FOURTEEN carloads of new 70-lb. steel rails, the first of a shipment of 650,000 tons from the huge Carnegie Mills, near Pittsburgh, Pa., destined for use in the Crow's Nest Pass branch of the Canadian Pacific Railway, passed through Toronto last week.

Dufferin County Council has purchased eight road machines for \$1,200.

Letters patent have been issued incorporating the Soo Mining and Exploring Co., of Algoma, Limited, with a capital stock of \$90,000.

The McClary Manufacturing Co., of London, were forced to lay off a few hands in the foundry department for a few days, owing to the shortage of pig iron.

The fire department of London has received 600 feet of new Paragon fire hose from the Gutta Percha Co., Toronto. The hose was tested the other day and most of it stood the pressure all right.

A statement prepared at the Mint Bureau, Washington, shows the number of silver dollars coined at the United States mints during the last fiscal year was \$21,203,701, on which the seigniorage or profits to the Government amounted to \$6,336,104.

John McNab, blacksmith, of Arva, is dead, aged seventy-eight. He was one of London township's oldest residents. George McNab, the London barrister who was thrown from his horse and killed three years ago, was his son.

Business is evidently picking up, and brighter prospects are ahead apparently. The Chatham Manufacturing Co. report their business as being in excess so far this year as compared with that of a similar time last year. Two carloads of wagons were this week shipped to British Columbia and one to Manitoba.—Chatham Banner.

Fred. B. Robb, secretary-treasurer of the Robb Engineering Co., was drowned near Wallace, N.S., on Tuesday, where he had been attending the Boys' Brigade camp. He was in swimming with a party of boys and was overcome by the heat and perished in shallow water. He was a leading citizen of Amherst, N.S., and well-known all over Canada.

The firm of Knapp & Cutts, Andover, are making arrangements for turning out a large number of patent Knapp & Cutts drill chucks. This device, which costs \$2, will perform the same work as one of more elaborate design, costing \$100, and at once finds favor with mechanics of all kinds. With it one can bore in any position, through any material. Mr. Knapp was in Woodstock this week in the interest of the firm of Knapp & Cutts.—Dispatch, St. John, N.B.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.

Sold by all Jobbers.

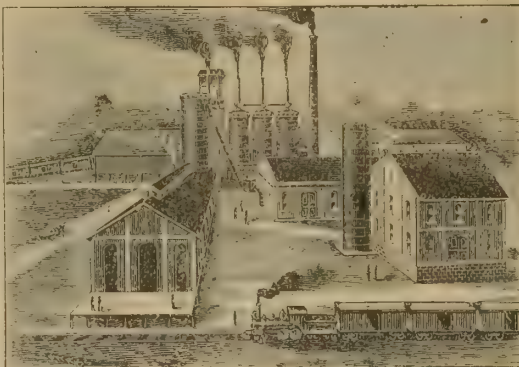
CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of

10 cents

HARDWARE AND METAL, Toronto



The Hamilton Blast Furnace Co., Ltd.

HAMILTON, Canada.

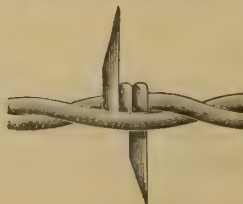
Manufacturers of

HIGH GRADE
PIG IRON.

BEST GALVANIZED BARB WIRE



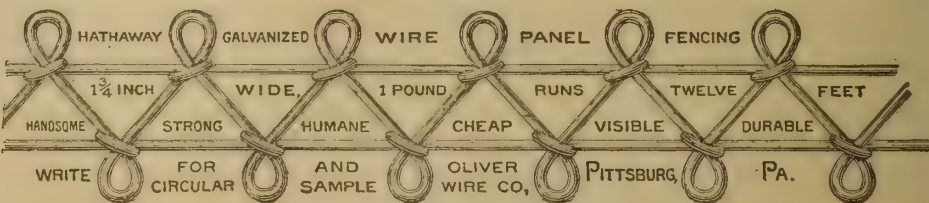
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MONTREAL

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That
BridleCHAS. BOECKH & SONS, Mfrs.
Toronto, Ont.

"All right," you say, "bring on the Bridle, where is it?" That's too bad—you haven't our illustrated catalogue. You can have it—send us your name and address. When you get it just show any Painter why our Flat Brushes are better (bridled with our patent bridle) than any twine or wire bound brush can possibly be. "No bulging" in the centre.

Boeckh's Flat
Bridled Brush

THE HEAVY PRODUCTION OF PETROLEUM.

THE OIL CITY DERRICK, in its June Pipe Line report, says :

The runs of Pennsylvania oil for June are the largest that have been recorded since the height of the McDonald excitement, and greater than that of any previous June since the early days of the Bradford field. The shipments were heavier than those of May or April, but lower than those of March, and the increase in the net stocks is the heaviest, with the exception of February, of any month of the present year.

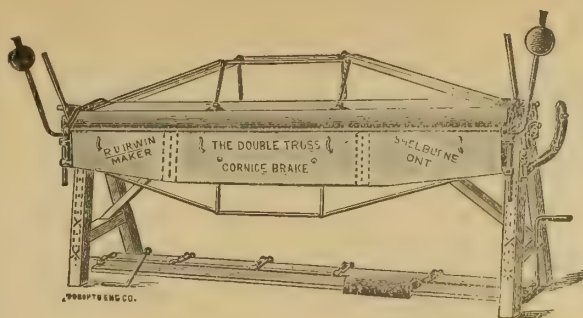
The June Pipe Line runs were nearly 6,000 barrels a day in excess of May, while May was nearly a thousand barrels a day behind April. The production of Pennsylvania oils the past month was over 12,500 barrels a day in excess of the consumption, and the stocks were increased over 385,000 barrels. The big wells of the Southwest were numerous the past month, as shown in the June report of drilling operations, and the West Virginia fields now exceed in daily output any other section of the producing region.

The total production of Pennsylvania oils for the first six months of the present year, as shown by the Pipe Line runs, was 16,801,179 barrels, or a daily average of 92,826 barrels. For the entire year 1896 the average was 91,000 barrels a day. The oil production of the United States for 1897 will probably exceed that of any previous year.

The net stocks at the close of the old year footed up 9,550,583 barrels. During January there was a gain of 159,409 barrels ; for the month of February there was an increase of 399,586 barrels, during March a gain of 111,473 barrels, during April an increase of 335,797 barrels, during May a gain of 306,204 barrels, and in June an increase of 385,659 barrels, bringing the net stocks on June 30 up to 11,248,710 barrels. The stocks have been on the increase since June, 1894. On June 30, 1896, they amounted to 7,601,666, and on June 30, 1895, to 4,109,788 barrels. At the present time they are over a million barrels more than they were on the last of June, 1894.

Stocks reached their lowest ebb at the close of June, 1895, when they were but 4,109,788 barrels. There has been a gain nearly every month since that time. The heaviest increase during 1896 was that of June, when a gain of 618,214 barrels was recorded. The total increase in the net stocks since the average production begun to show an advance over the average consumption has been 7,138,923 barrels.

Ottawa has purchased two La France fire engines from the agents in Montreal, Messrs. John Martin, Sons & Co.



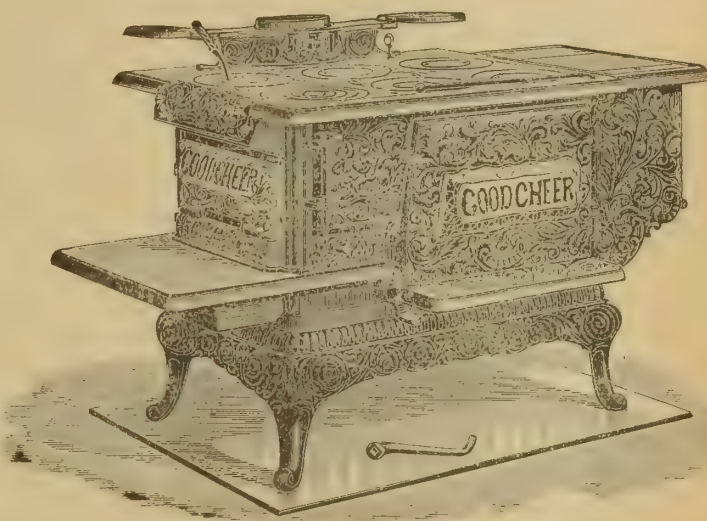
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

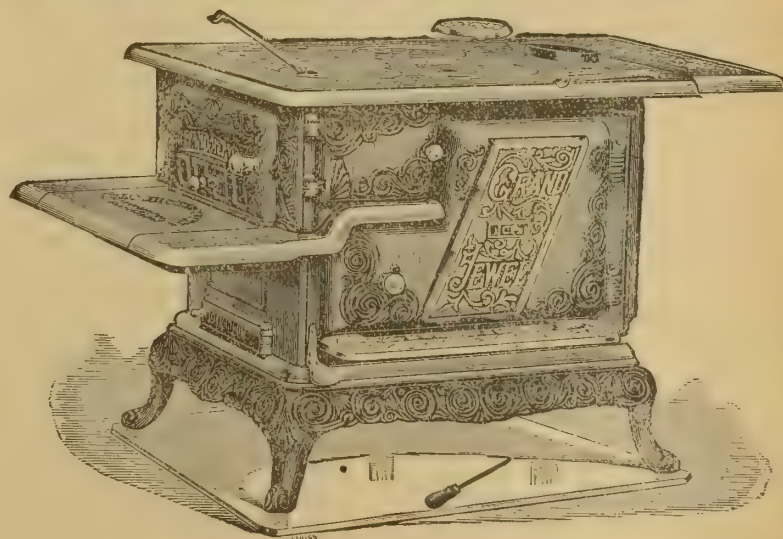
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With Patent One-piece Cold-rolled

SHEET STEEL OVEN.



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Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

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WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son, MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

THE JOHN EATON CO., LIMITED, department store, Toronto, has assigned to E. H. C. Clarkson.

— Gallivan, hardware merchant, Salina, N.S., has assigned.

A. E. Faucher, general merchant, Fraser-ville, Que., has assigned.

R. M. Foran, general merchant, Inker-man, N.B., has assigned.

Lucien Beaudette, general merchant, St. Jean des Challons, Que., has assigned.

The Ranger Cycle Co. of Toronto, Limited, have assigned to C. E. Dyer, Toronto.

Moore & Kerr, general merchants, Orillia, Ont., have assigned to E. J. Henderson, Toronto.

Fannie L. Malzard, general merchant, Arichat, N.S., is offering to compromise at 50 per cent.

A meeting of the creditors of Therrien & Co., general merchants, St. Remi, Que., has been called for the 21st inst.

G. H. Kerr, general merchant, Lake Megantic, Que., has assigned to Rover & Burrage. A meeting of creditors is called for the 22nd inst.

PARTNERSHIPS FORMED AND DISSOLVED.

McCausland & Rowse, manufacturers of laundry machinery, Brantford, have dissolved.

Blaicher & Riche, dealers in drugs and paints, Hamilton, have dissolved. John A. Riche continues, with style unchanged.

Alex. Freniere, jr., and Eugene Marceau have formed a partnership in Quebec to trade as painters under the style of Freniere & Marceau.

V. Vaillancourt and Nap. Barbeau have formed a partnership in Quebec to do business in paints under the style Vaillancourt & Barbeau.

Joseph C. Berube and Wilfrid Berube have formed a partnership in Montreal to do business as sculptors under the style J. C. Berube & Co.

B. Shaw, John Cassils, C. T. Shaw, and H. B. Cassils have formed a partnership in Montreal to trade as tanners and leather merchants under the style Shaw, Cassils & Co.

Pineo & Merrick, general merchants, Virden and Griswold, Man., have dissolved partnership. Joseph A. Merrick continues the Virden branch and C. E. Pineo continues the Griswold branch.

SALES MADE AND PENDING.

The assets of the general business of Robert Stafford, Joliette, Que., are to be sold.

The general stock of Mathias Blaquiere, Avignon, Que., has been sold at 50c. on the dollar.

The assets of James Gillis, general merchant, Metapedia, Que., are advertised for sale on the 21st inst.

James A. Bowes, blacksmith, Dartmouth, N.S., has sold out.

Louis Favreau, machinist, Montreal, has sold his stock at 25c. on the dollar.

J. F. Garipey, carriage maker, Montreal, has sold his stock at 41c. on the dollar.

Assets of McLean & Oakley, manufacturers of bicycles, Toronto, are advertised for sale by assignee.

The assets of W. Tallman & Son, manufacturers of brick and tile, Beamsville, Ont., are advertised for sale by tender.

CHANGES.

The Molsons Bank is about to open up a branch in Quebec.

Edward J. Holland is starting a hardware business at Ottawa.

Blaquire & Arsneault, are commencing a general business at Avignon, Que.

The premises of Alfred Breton, saddler, St. Evariste de Forsyth, Que., are closed.

Wilfrid Burr, general merchant, Bloomfield and Consecon, Ont., has been succeeded at Consecon by J. A. Eaton.

The Davy Bros. Co., Bancroft, Ont., proprietors of general store and mills, have been succeeded in the general business by Chester Davy.

Amanda Deneault, wife of Thomas Degruchy, has been registered proprietress of the business of Racine, Degruchy & Co., canners, La Prairie, Que.

FIRES.

Geo. Bradford, blacksmith, Saltford, Ont., has been burned out.

Samuel Ward, bicycle dealer, Niagara Falls, Ont., has sustained loss by fire.

Neveux, Clinton & Baxter, hardware merchants, Windsor, Ont., have been burned out.

Lorne Currie, bicycle repairer, Ottawa, has had his premises partially damaged by fire and water. Insured.

DEATHS.

F. B. Robb, of the Robb Engineering Co., Amherst, N.S., is dead.

Wm. Buck, manufacturer of stoves and ploughs, Brantford, Ont., is dead.

Louis R. Leblanc, of the Leblanc Manufacturing Co., West Pubnico, N.S., is dead.

CATALOGUES, BOOKLETS, ETC.

The Peterborough Lock Co., Peterborough, are just issuing a very handsome catalogue of over 100 pages, containing a full description of their whole output. It will be in the hands of the retail trade in a few days. This is the finest catalogue of the kind this firm has ever issued. It is bound very neatly and contains a lithograph of each and every pattern of lock they manufacture, from the cheapest to the most expensive, in both rim and mortice. It also illustrates all their latches. It reflects credit both on the enterprise of this firm as well as on that of the publishers.

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with Flint or Sand Papers.

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All kinds of Scales
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Write for Catalogue.



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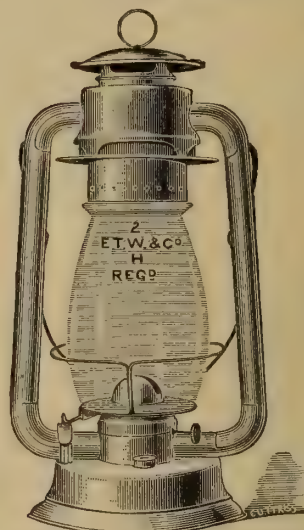
Manufacturers
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**Tubular and
Cold Blast
Lanterns**

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Mouse Traps
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Stamped
Re-tinned
and Japanned

..TINWARE



HAMILTON - CANADA.

**"It's the Wick
Does the Trick"**

**Wolff-American
High Art Cycles.**

**Have
Self-
Oiling
Bearings.**

REQUIRE NO ATTENTION — HOLLOW
AXLE CONTAINS WICK HOLDING ENOUGH
OIL FOR 1,500 MILES OF RIDING.

DORKEN BROS. & CO.

MONTREAL.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

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Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.
Ingersoll - Ontario.

The Niagara Falls Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

U. S. PIG IRON PRODUCTION.

THE Iron Age, in reviewing the pig iron production for June, says:

The net result of a number of changes in furnaces working during June is a moderate decrease in the current production of pig iron. The weekly capacity of the furnaces in blast on July 1 compares as follows with that of preceding periods:

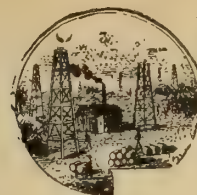
	Furnaces in Blast.	Capacity Per Week. Gross tons.
July 1, 1897	145	164,064
June 1	146	168,380
May 1	146	170,528
April 1	153	173,279
March 1	150	169,986
February 1	154	162,959
January 1	154	159,720
December 1, 1896	147	142,278
November 1	143	124,077
October 1	130	112,782
September 1	145	129,500
August 1	173	157,078
July 1	191	180,532
June 1	194	182,220
May 1	196	180,398
April 1	200	187,451
March 1	207	189,583
February 1	215	198,599
January 1	241	207,481
December 1, 1895	242	216,797
November 1	239	217,306
October 1	232	201,414
September 1	215	194,029
August 1	200	180,525
July 1	185	171,194
June 1	172	157,224
May 1	171	150,554
April 1	171	158,132
March 1	173	156,979
February 1	179	163,391

In comparison with previous months the record of the coke and anthracite and charcoal furnaces stands as follows in gross tons:

	Coke and —Anthracite—		Charcoal—	
	Number in blast.	Capacity per w.k.	Fur'ces in blast.	Capacity per w.k.
July 1, 1897	131	161,170	14	2,804
June 1	131	165,059	15	3,321
May 1	133	169,799	13	3,729
April 1	137	167,911	16	5,368
March 1	138	164,561	18	5,125
February 1	136	157,815	18	5,144
January 1	135	154,264	19	5,456
December 1, 1896	128	137,006	19	5,182
November 1	112	119,094	21	5,083
October 1	105	105,520	24	6,502
September 1	124	123,271	21	6,220
August 1	150	150,814	23	6,264
July 1	168	174,041	23	6,491

SHEET IRON PRODUCTION.

The overproduction of common sheet iron for galvanizing purposes in South Staffordshire district of England has for some time past rendered the trade a profitless enterprise, and it is not surprising that several mills and forges engaged in the manufacture of this class of iron will cease operations at an early date. Sheet iron production during the past year has considerably increased in the Black Country, and concurrently with this increase many of the tin plate makers of South Wales, finding the United States, their leading market, practically closed against them by prohibitive tariffs, have converted their works into sheet iron rolling mills. From a South Wales point of view, this is the very wisest course that could have been adopted. Owing to its proximity to the seaboard, it possesses the double advantage of low freightage rates to British colonies, and of obtaining spelter at prime cost when landed. Compared with this, South Staffordshire sheet makers have to pay a heavy freightage to the nearest port, and the local galvanizers have to pay a double freightage on spelter from and to the sea.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for...

Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
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Work

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Manufacturers of

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Piano Stool Feet, Novelties, etc. Bicycle Work
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Work of all kinds in Brass and Nickel Plating.

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"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL

CURRENT MARKET QUOTATIONS

TORONTO, July 23, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 00
Straits " " " " " " 0 16 0 00

Tin Plates.

Charcoal Plates—Bright.

J. S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. " " " " " " 6 25
I.X.X. " " " " " " 7 50
J. R. & Co.—
I.C. " " " " " " 5 00
I.X. " " " " " " 6 25
I.X.X. " " " " " " 7 50

Famous—

I.C. " " " " " " 5 00
I.X. " " " " " " 6 25
I.X.X. " " " " " " 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50 3 60
I.X. " " " " " " 4 50 4 60
I.X.X. " " " " " " 5 50 5 60
I.X.X.X. " " " " " " 6 50 6 60
D.C. 12 1/2 x 17 " " " " " " 3 50 3 75
D.X. " " " " " " 4 50 4 75
D.X.X. " " " " " " 5 75 6 00

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

I.C., usual sizes 3 15
I.C., special sizes 3 25
20x28 " " " " " " 6 25

Charcoal Plates—Terne.

Dean or J. G. Grade
I.C., 20x28, 112 sheets 6 25 6 50
I.X., Terne Tin " " " " " " 8 00
I.X., Orion " " " " " " 8 00

Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs } Per lb.
" 14x60, " " " " " " } 0 05 1/4 0 06
" 14x65, " " " " " " }

Tinned Sheets.

72x30 up to 24 gauge 0 06 0 06
26 " " " " " " 0 06 1/2
28 " " " " " " 0 07 1/4 0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs 1 55
Refined " " " " " " 1 80
Horse Shoe " " " " " " 1 80
Band " " " " " " 2 25
Hoop " " " " " " 2 25
Swedish " " " " " " 4 00 4 25
Sleigh Shoe Steel " " " " " " 2 50
Tire Steel " " " " " " 2 50
Machinery " " " " " " 2 75 3 00
Cast Steel, per lb 0 10 0 14
Russian Sheet, per lb 0 10 1/2 0 11
Tank Plates, 1-5 and thicker. 2 00 2 25
Boiler Rivets 4 50 5 00

Boiler Tubes.

1 1/2-inch 0 06 1/2
2 " " " " " " 0 07 1/2
2 1/2 " " " " " " 0 09 1/4
3 " " " " " " 0 11

Steel Boiler Plate.

1/2 inch 2 45
3/4 " " " " " " 2 35

3/4 inch and thicker. 2 25

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " " " " " " 2 35
26 " " " " " " 2 45
28 " " " " " " 2 55

Canada Plates.

All dull, 52 sheets 2 50
Half polished 2 50 2 60
All bright 3 00 3 25

Iron Pipe.

Wrought, 1/4 to 5/8 inch. \$1.87; 1/2 inch, \$2.10;
3/4 inch, \$2.45; 1 inch, \$3.40; 1 1/4 inch, \$4.50;
1 1/2 inch, \$5.87; 2 inch, \$7.87.
Galvanized, 1/2 inch, 4c. 3/4 inch, 4 1/2 c. 1 inch,
6 1/2 c. 1 1/4 inch, 10 1/2 c. 1 1/2 inch, 11 1/2 c.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 5 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge 0 03 1/2
18 to 20 gauge 0 03 3/4
24 gauge 0 04
26 " " " " " " 0 04
28 " " " " " " 0 04 1/2

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " " " 4 75
" 5-16 " " " " 4 00
" 3/8 " " " " 3 75
" 7-16 " " " " 3 35
" 1/2 " " " " 3 25
" 9-16 " " " " 2 95
" 5/8 " " " " 2 85
" 3/4 " " " " 2 75
Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards. 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards. 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 1/4 0 12
Lake Superior " " " " " "
Bolt or Bar.
Cut lengths, round, 1/2 to 3/4 in.
round and square
1 to 2 inches. 0 18 0 19
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.

Planished and tinned, 14x48
and 14x60 0 25 0 27
Braziers. (In sheets.)
4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " " " " 0 15 1/2 0 16 1/2
" 50 lb. and above, " " " " 0 15 0 16

Boiler and T. K. Pitts.
Plain Tinned, per lb 0 21
Spun, per lb. 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
nests, hard-rolled, 2x4 ft. 0 20 0 00

Zinc Spelter.

Foreign, per lb 0 04 1/2 0 04 3/4
Domestic " " " " " " 0 03 3/4 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/2
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 03 1/2 0 03 3/4
Domestic, per lb 0 02 3/4
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 3/4
Sheets, 3 to 6 lbs., per sq. ft.,
by roll. 0 04 0 04 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 30 per cent. discount.
NOTE.—Cut lengths, net price, waste pipe,
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Per lb. Pe
Bar half-and-half 0 11 0 11 1/2
Standard " " " " " " 0 10 1/2 0 11
Wire " " " " " " 0 17 0 19
NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal.

Per lb.
'Beaver' brand \$0 20

White Lead.

Per cwt.
Pure, Assoc. guarantee, ground in oil.
25 lb. irons 5 15
No. 1 do 4 77 1/2
No. 2 do 4 40
No. 3 do 4 02
No. 4 do 3 65
Brandram's B. B. Genuine 6 25
" " Decorative 5 95
" " No. 1 5 35
" " No. 2 4 65
f.o.b. Halifax, St. John, Montreal, Toronto
James genuine 6 50
No. 6 00

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 05
Chrome Yellow 0 11
Golden Ochre 0 06
French " " " " " " 0 05
Marine Black 0 09
Green " " " " " " 0 09
Chrome " " " " " " 0 09
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J.F.L.S.), bbls.
cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
Umber, " " " " " " 0 10
do. aw " " " " " " 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2
Ultra marine Blue in 28-lb.
boxes, per lb. 0 08

Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Licharge, per lb 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 64 1/2
Pure Ind an Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green

Casks 0 13 1/2
5-100 lb. kegs. 0 14
25-lb. Irons. 0 14 1/2
1-lb. Boxes 0 15

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk " " " " " " 1 60
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.)
No. 1 Furniture, per gal 0 65
Extra " " " " " " 0 90
Brown Japan " " " " " " 0 65
Brown Japan, Turpentine, p.g 0 85
No. 1 Carriage, per gal 1 30
And ex. No. 1 Carriage 1 60
Gold Size Japan, per gal. 1 00 1 20
Pure Orange Shellac 1 35 2 20
Hard Oil Finish. 1 10
Oil Shellac 1 20
White Shellac. 2 25

Linseed Oil.

Raw, per gal. net. 0 41
Boiled, per gal. net. 0 44
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net. 0 41
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 08 1/2
Small lots. 0 09

Cod Oil.

Cod Oil, per gal. 0 50 0 55

Glue.

(In bbls.)
Common 0 07 1/2 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet. 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear. 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to
30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent.
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Mil-
itary, Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and"
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 17 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent.
Primers, Dom., 30 per cent.



Wads.—Baldwin			Blind Rollers.			Cradles, Grain.			HAMMERS.		
Best thick white felt wadding, in ½ lb. bags.....	1 00		Annex, per doz.....	1 25	1 75	Canadian, dis. 25 per cent.			Nail		
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70		Mascott, ".....	1 35	1 85	Dies.			Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99		Erminie, ".....	1 12	1 20	Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			Tack.		
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35		Blind and Bed Staples.			Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			Magnetic, per doz.....	1 10	1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55		sizes, per lb.....	0 73	0 12	Door Springs.			Sledge.		
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20		Bolts.			Torrey's Rod, per doz..... (15 p.c.)	2 00		Canadian, per lb.....	0 07½	0 08½
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25		Carriage, dis., 70 p.c. off new list			Coil, per doz.....	0 88	1 60	Ball Pean.		
Thin card wads, in boxes of 1,000 each, 8 gauge.....	1 10		Tire, dis., 70 and 5 per cent.			English per doz.....	2 00	4 00	English and Can., per lb.....	0 22	0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—			Stove, dis., 70 and 5 per cent.			Draw Knives.			HANDLES.		
11 and smaller gauge.....	0 60		Elevator, dis., 35 to 40 per cent.			American, dis. 70 and 10 per cent.			Axe, per doz., net,.....	50	2 00
9 and 10 gauges.....	0 70		Machine, dis., 70 p.c.			Canadian, dis. 25, 50 and 10 per cent.			Store door, per doz.....	1 90	1
7 and 8 gauges.....	0 90		Coach Screws, dis. 77½ p.c.			Drills.			Chest, per doz. pairs.....	0 40	2 50
5 and 6 gauges.....	1 10		Boring Machines.			Hand and Breast.			Chisel.		
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—			Complete, with augers, each.....	5 00	7 50	Millar Falls, per doz.....	16 00	51 50	Firmer, per gross.....	3 00	4 50
11 and smaller gauge.....	1 15		Braces.			P. S. & W., dis. 40 per cent.			Socket Firmer, per gross.....	3 25	8 00
9 and 10 gauges.....	1 40		Barber's.....	6 00	7 75	DRILL BIT.			Socket Framing, per gross.....	3 75	5 00
7 and 8 gauges.....	1 65		Barber's Ratchet.....	10 00	11 00	Morse, dis. 37½ to 10 per cent.			Forck.		
5 and 6 gauges.....	1 90		Farmers.....	2 00	2 75	Standard, dis. 47½ to 50 per cent.			C. & B., dis. 50 per cent. rev. list.		
Anvils.			Har's Falls.....	15 50	29 00	Reversible, dis., 65 to 67½ per cent.			C. & B., dis. 50 per cent. rev. list.		
Per lb.....	0 10	0 12½	Brackets.			Vegetable, per doz., dis. 37½ per cent.			Saw.		
Anvil and Vice combined, each.....	4 50		Shelf.			Henis, No. 8,.....	6 00		American, per doz.....	1 00	1 25
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½	Japanned Canadian, per doz.	0 50	3 40	Henis, No. 9,.....	7 00		Plane.		
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10	Berlin Bronze Canadian.....	0 85	3 20	Queen City.....	7 50	10 00	American, per gross.....	3 15	3 75
Augers.			Broilers.			ELBOWS.			Hammer and Hatchet.		
Gilmour's, discount 65 per cent.			Light, dis., 65 to 67½ per cent.			Stovepipe.			Canadian, 35 per cent.		
Hollow Stearn's, per dozen.....	13 00	20 00	Reversible, dis., 65 to 67½ per cent.			Per doz.....	75	1 70	Cross-Cut Saw.		
Adjustable Stearn's, each.....	5 50	6 50	Vegetable, per doz., dis. 37½ per cent.			FAWCETS.			Canadian, per pair.....	0 15	0 0
Post-hole, Vaughan's, each.....	1 35	1 60	Gen. Bronzed, per pair.....	0 40	0 65	Cork Lined, per doz.....	0 30	0 35	HANGERS.		
Excelsior, Jennings', discount 50 per cent.			Butchers' Cleavers.			Wine, per doz.....	1 30	3 25	Door, 4 and 5 inch, per pair.....	0 40	
Awls.			From 8 to.....	4 23		Star,.....	2 80	3 90	Lanes, 50 to 50 and 5 per cent.		
Sewing, per gross.....	0 65	1 59	Butts.			Fenn's Corkstops, No. 2, per dozen.....	1 70		HATCHETS.		
Pegging, ".....	0 65	1 25	Brass.			Petroleum, per doz.....	4 50	6 50	Canadian, dis. 40 to 42½ per cent.		
Brad, ".....	0 85	1 60	Wrought Brass, dis., 17½ p.c. revised list.			FILES AND RASPS.			HINGES.		
" handled, per gross.....	3 60	30	Cast Iron.			Globe File Mfg. Co.'s dis., files and rasps, 50 and 10 to 70 per cent.			Blind, Parker's, dis. 60 and 10 to 65 per cent.		
Saddlers, per gross.....	0 45	1 60	Loose Pin, dis. 70 per cent.			Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			" Shepard's Noiseless, dis. 60 per cent.		
Awl Hafts.			Wrought Steel.			Black Diamond, 50 and 10 per cent. to 50 10, 5.			" Buffalo, dis. 60 to 70 p.c.		
Patent Peg,.....	7 25	8 00	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.			Light T and strap, 70 p.c.		
" Sewing, per gross.....	7 25	8 00	Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.			Heavy, per lb.....	0 03¾	0 04¼
Awl and Tool Sets.			Berlin Bronzed, dis. 70, 70 and 5 per cent.			Heller's Horse Rasps, 50 per cent.			6 to 12 in., per 100 lbs.....	3 15	
AXES.			Gen. Bronzed, per pair.....	0 40	0 65	Jowitt's, English list, 25 to 27½ per cent.			14 in. up, per 100 lbs.....	2 35	
Splitting Axes.....	5 25	5 50	Can Openers.			American, 60 to 60 and 10 per cent.			Per doz. set.		
Chopping Axes.....	7 25	7 50	Acme, per gross.....	9 00	10 00	Great Western, 60 and 10 per cent.			Screw, Enreka.....	1 13	1 80
Black Prince.....	7 25	7 50	Sardine Scissors, per doz.....	3 75	4 50	FLUTING MACHINES.			Gate, Clark's.....	1 50	2 20
Forest Clipper.....	8 50	9 00	Card.			Each.....	0 60	2 00	" Shepard's, dis. 50 to 60 per cent.		
Lance.....	8 50	9 00	Horse, per do.....	0 60	1 00	FORKS.			Spring.....	1 00	3 50
Mann's.....	8 00	8 25	Carpet Stretchers.			Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.			" Shepard's Samson.....	1 20	
Maple Leaf.....	9 50	10 00	American, per doz.....	1 00	50	FREEZERS			HOOKS.		
Hand Made.....	7 50	7 75	Bullards, per doz.....	6 50	....	Ice Cream.			Cast Iron.		
Climax.....	8 00	8 25	Carpet Sweepers.			Gem, from \$1.25 to \$7 net.			Bird Cage, per doz.....	0 50	1 10
Phantom.....	8 25	8 50	Bissell, per doz.....	22 50		FRUIT PRESSES.			Clothes Line, per doz.....	0 27	0 63
Axle Grease.			World, ".....	21 75		Henis', per doz.....	3 25	3 50	Harness, per doz.....	0 72	0 88
Per gross.....	6 00	13 00	Daisy, ".....	24 00		Enterprise, dis. 10 per cent.			Hat and Coat, per gross.....	1 00	3
Bath Tubs.			Star.....	18 00		Shepard's Queen City, dis. 15 per cent.			Chandelier, per doz.....	0 50	1
Zinc, discount.....	3 90	4 0	Crown Jewel, per doz.....	29 00		FRY PANS.			Wrought Iron.		
Copper, discount, 40 and 10 p.c. off revised list			Grand Rapids, ".....	24 00	33 00	Acme, dis. 62½ to 65 per cent.			Wrought Hooks and Staples, Can., dis. 47½ per cent.		
Steel clad, 20 per cent. discount.			Cartridges.			GAUGES.			Wire.		
Boxing extra			(See Ammunition.)			Marking, Mortise, Etc.			Hat and coat, dis. 60 to 60 and 10 p.c.		
Bells.			Castors.			Stanley's, dis. 50 to 55 per cent.			Belt, per 1,000.....	0 60	2 7
Hand.			Bed new list, dis. 55 to 57½ per cent.			Wire Gauges.			crew, bright, Eng., dis. 60 per cent.		
Brass, 60 per cent.			Plate, dis. 55 to 57½ per cent.			Winn's, Nos. 26 to 33, each.....	1 65	2 40	HORSE NAILS.		
Nickel, 55 per cent.			Cattle Leaders.			GLASS.			Canadian, dis. 50 p.c.		
Door.			Nos. 31 and 32, per gross.....	8 50	9 50	Window.			Canada Horse Nail Co.'s, "C" brand F.o.b. Montreal,.....	50 p.c.	
Gon Sargent's.....	5 50	8	Cement.			Box Price.			HORSE SHOES.		
" Peterboro', discount 50 per cent.			Canadian, Portland.....	2 50		Star.			F.o.b. Toronto and Hamilton.....	3 35	
Cow.			English.....	2 75		Size			Steel, ".....	4 85	5
American make, discount 66½ per cent.			Belgium.....	2 50		United			F.o.b. Montreal 10c. less, and London more than above.		
Canadian, discount 45 and 50 per cent.			Canadian hydraulic.....	1 10		Inches.			ICE PICKS.		
Farm.			Chalk.			Per 50 ft.			Star per doz.....	3 00	3 25
American, each.....	1 25	3 00	Carpenters' Colored, per gross.....	0 45	0 75	Per 100 ft.			KETTLES.		
House.			White lump, per cwt.....	0 60	0 65	Per 50 ft.			Brass spun, 7½ p.c. dis. off new list.		
American, per lb.....	0 35	0 40	Red.....	0 05	0 06	Under 26	1 20	2 30	Copper, per lb.....	0 30	35
Bellows.			Crayon, per gross.....	0 14	0 18	26 to 40	1 35	2 60	American, 60 and 10 to 65 and 5 p.c.		
Hand, per doz.....	3 35	4 75	Chisels.			41 to 50	3 00	3 00	KEYS.		
Moulders, per doz.....	7 50	10 00	Socket, Framing and Firmer.			51 to 60	3 30	3 30	Lock, Can., dis. 50 p.c.		
Blacksmiths', discount 60 per cent.			American, dis. 75 to 77½ per cent.			61 to 70	3 60	3 60	abinet, trunk, and padlock,		
Belting.			Canadian, dis. 50 and 10 per cent.			71 to 80	4 50	5 60	Am. per gross.....	1 60	
Extra, 40 and 10 per cent.			Tanged firmer, per doz.....	0 85	4 00	81 to 85	4 50	6 35	KNOBES.		
No. 1, leather, discount 60 per cent.			Churns.			GLUE POTS.			Door, japanned and N.P., pe		
Standard, 55 per cent.			Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.			Tinned, each.....	0 30		doz.....	0 85	3 00
Agricultural, 65 and 10 to 70 p.c.			Steel, net.....	3 00		Enamelled each.....	0 55		Bronze, Berlin, per doz.....	2 75	3 25
Bench Stops.			Clamps.			GRINDSTONE FIXTURES.			Bronze Gem, ".....	6 00	9 00
Per doz.....	5 00	6 00	Judds', dis. 20 per cent.			P. S. & W., per doz.....	3 30	4 00	Sava, ".....	8 75	10 00
Bits.			Stearn's, per doz.....	3 00	10 00	Shutter, porcelain, F. & L. screw, per gross.....			Shutter, porcelain, F. & L. screw, per gross.....	1 30	
Auger.			Clips.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Gilmour's, discount 65 and 5 per cent.			Axle dis. 65 per cent.			American, dis. 62½ to 65 per cent			COMPASSES, DIVIDERS, ETC.		
Excelsior, discount 60 per cent.			Coffee Mills.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Rockford Common, 65 to 65 and 5 per cent.			Bo.....	3 60	13 00	COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
" Perfection, 50 and 10 per cent.			Side.....	3 60	4 00	COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Jennings' Gen., net list to 5 p.c. discount.			Enterprise, No. 0.....	1 35		COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Car.			No. 2.....	70		COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Gilmour's, 47½ to 50 per cent.			Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Expansive.			Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Clark's, per cent.			Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Excelsior, 10 per cent.			Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Gimlet.			Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Clark's, per doz.....	0 65	0 90	Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Diamond, Shell, per doz.....	1 00	1 50	Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		
Nail and Spike per gross.....	2 25	5 20	Compasses, Dividers, Etc.			COMPASSES, DIVIDERS, ETC.			COMPASSES, DIVIDERS, ETC.		

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50
 Cabinet,
 Eagle, dis. 27½ to p.c.

PADLOCK.

English and Am., per doz. 0 50 6 00
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.
 Flat head, discount 25 p.c.
 Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 18
 Mystic Metal, " 08
 F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50
 Carpenters', hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.95 f.o.b., Toronto, Montreal, Hamilton, London.

Cut Nails (Steel). Add 10c. to the prices in list for iron nails. 10-keg lots freight prepaid to maximum of 25c. per 100 lbs.

Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburgh is less than carload lots does not exceed 21c.; other places where rate is higher, excess is added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.

Brads and moulding nails, 80 p.c. from new list.

NAIL PULLERS.

German and American, 1 85 50

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00
 Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
 Carbon safety " 0 18 0 00
 Canada w. w. " 0 18 0 00
 American w. w. " 0 00 0 21
 Pratt's Astial. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.
 Copper, per doz. 1 25 3 50
 Brass, " 1 50 3 50
 Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25
 " Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 65 3 00
 Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis, Mfrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range ½ to 4. 100 00

No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.

Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, 70 to 70 and 5 p.c.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors, " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Bokers', " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. in ½-lb. boxes and cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 5½ 00 7½

¾ in. " 5½ 00 7½

½ and 5-16 in. " 6½ 00 8½

Cotton " 15 17

Russia Deep Sea " 00 13

Jute " 6½ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 60 1 00

" N.P., per set. 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

B. & A. sand, 40 and 5 to 45 per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 25

SAWS.

Crosscut, McMillan & Haynes, per dozen 0 40 0 70

" Empire, McMillan & Haynes, per ft. 0 00 0 70

Hand, Disston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Disston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

" Lincoln, McMillan & Haynes, per doz. 0 00 7 50

Whiting, " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

oot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 40 to 45 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 80 p.c.

N.P., dis. 70 p.c.

Clauss, full nickel, 60 p.c.

japanned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

" tinned, " 1 25 1 35

Tin rim, per doz. 2 30 2 45

" black, " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme " 3 00 5 00

Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

Per lb. 0 00 0 24

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English 1 8 5 00

Iron, American 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross 7 50 12 00

Dessert, " 21 00 00 00

Table, " 30 00 30 00

Dessert Forks, " 24 00 00 00

Medium " 27 00 00 00

Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90

Steel, dis. 70 per cent., revised list.

Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized 00 2½ 00 2½

Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb. 0 28 0 60

Hindostan, " 0 06 0 07

slips, per lb. 0 09 0 09

Labrador, " 0 00 0 13

Turkey " 0 00 0 15

Arkansas " 0 00 0 50

Water-of-Ayr " 0 00 0 10

Scythe, per gross. 3 50 5 00

Grind. per ton. 15 00 18 00

TACKS, BRADS, ETC.

Cheese-box tacks, blue, 80 p. c.

Trunk tacks, black, 80 p. c.

" tinned, 80 p. c.

B.B.B. iron carpet, blued. 80

PEARSON'S
PATENT

Cone Rotary Ventilator



For Balty Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2½ to 48 inches.

The Montreal Roofing Co.

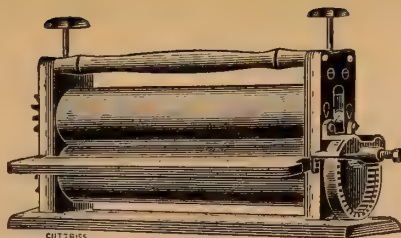
Sole Manufacturers for the Dominion, Montreal



ONE
DOLLAR
A
YEAR

★
Sample
Copy
Free

★
D. T. Mallett
Publisher
271 Broadway
New York



THE IMPROVED DOMESTIC MANGLE

Something new and good—**INTERNAL GEAR**—strong and convenient—meets all ordinary requirements—is not expensive—should be in every home. Buy before the hot weather arrives. Send for samples and prices.

The Dowswell Manufacturing Co.

Limited
HAMILTON - ONT.

CHARLES F. CLARK,
President.

EDW. F. RANDOLPH,
Treasurer

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY,
Executive Offices Proprietors.

NOS. 346-348 BROADWAY, NEW YORK
Offices in the principal cities of the United States, Canada, the European Continent, Australia, and in London, England.

The Bradstreet Company is the oldest and, financially, the strongest organization of its kind—working in one interest and under one management—with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

TORONTO OFFICE.

McKinnon Building, Cor. Jordan and Melinda Sts.
THOS. C. IRVING, Superintendent

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

Brushes

Catalogue
for

1897

Now Ready

MEAKINS & CO. 313 St. Paul Street . . MONTREAL

and Meakins & Sons, Hamilton.

Round Bottom Indurated Fibreware Fire Pails



Where no fire brigade exists they are an absolute necessity.

As assistants to the fire brigade they are invaluable.

The E. B. EDDY CO.

Limited

HULL, QUE.

E. t. 1863

Inc. 1895

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

Awarded
By **JURORS** at
International Expositions
Special Prize

Gold Medal at Atlanta, 1895

WE WANT TO HEAR.



WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

Our First Thought . .

in manufacturing paints, and
our one aim in selling them, is to give you a quality that cannot be excelled, at a price that will pay you well to handle them.

That it pays us to do this our largely increased trade has proven beyond all doubt.

The intelligent trade of Canada cannot be humbugged, and our experience has demonstrated very clearly that sincere, honest methods carry with them the most success, and eventually triumph over bluff, blow, and bombast.

We have never made a statement to our customers that we could not fully substantiate, but have weighed every word thoughtfully in the scale of fact—as a result, everybody knows just what to expect, and expect just what they get—
THE VERY BEST PAINTS AT THE VERY LOWEST POSSIBLE PRICE.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, **Toronto**

Telephones 819, 1511 and 1292.

THE PAINT MAKERS

Excellent Anti-friction Metal.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, JULY 31, 1897

No. 31



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.
MONTREAL OFFICE—

Owners and Sole Manufacturers,

Caverhill, Learmont & Co.

General Dominion Agents.

266 and 267 West St., New York

Queen's Head Galvanized Sheet Iron

STANDARD OF THE WORLD



CANADA.

Quality and appearance
unsurpassed. . . .

Price as low as any first-
class iron can be.

For Sale by all Leading Jobbers.

Largest Radiator Manufacturers under the British Flag.

Not how cheap, but how good !

If you have never used Safford Radiators, try them this season. If they don't come up to your expectations and fill all our claims, we are prepared to quit, good friends. *Try them ! !*

"Safford" "Standard" Radiators

The only Perfect Radiator in the World without
Bolts, Packing or Washers.

MADE ONLY BY

THE

TORONTO RADIATOR MFG. CO. Limited
Toronto, Ont.



RICE LEWIS & SON

(LIMITED)

ARTHUR B. LEE, President.

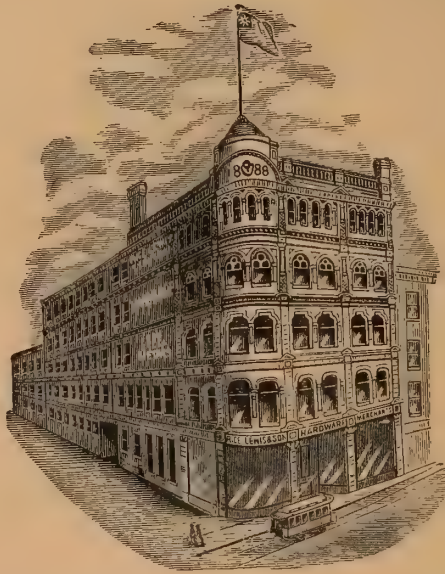
A. BURDETT LEE, V-P. and Treas.

Importers of

Bar Iron, Steel
Boiler Plate

SHELF AND HEAVY

HARDWARE



Mantels

Grates

... Tiles

CUTLERY

FINE BUILDERS' HARDWARE.

Cor. King and Victoria Streets,

TORONTO

A Complete Lavatory

The cut shown illustrates our **Patent**

COMBINED BATH AND WASH BASIN



Hot and Cold Water Supplied to Bath and Basin.
Waste from Basin DOES NOT Discharge into Bath.

SEND FOR PRICES

The Toronto Steel-Clad Bath
and Metal Co. Ltd.

125 and 127 Queen St. East, TORONTO

The Slick Oil Can

PATENTED 1896.

Advantages . .

A Lantern or Lamp can be filled in the dark easier than by the ordinary Can, as it is impossible to overflow.

NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP

The pump is attached in the simplest and strongest manner possible. . . .

Will not get out of order with ordinary use.
A Strong, Perfect Can, at a Low Price.



KEMP MANUFACTURING CO.

Toronto



Vol. IX.

MONTREAL AND TORONTO, JULY 31, 1897

No. 31

J. BAYNE MacLEAN, President. HUGH C. MacLEAN, Sec.-Treas.

THE MacLEAN PUB. CO.
Limited

Fine Magazine Printers
and
Trade Newspaper Publishers

TORONTO: 26 Front St. W. Telephone 2148.
MONTREAL: Board of Trade Bldg. Telephone 1255.

John Cameron, General Subscription Agent.
Major A. G. Campbell, General Subscription Agent.

AN UNBUSINESSLIKE POLICY.

THE people of the United States have the reputation of being sharp business men. And the reputation is not unwarranted. But of late years, at any rate, it has applied only to their manner of dealing with one another. In regard to the arts of international trade they appear to be merely tyros.

Large as is the population of the United States, and great and varied as are the possibilities of that country, it is more or less dependent upon international trade for its development. And that need is becoming more pronounced as the nation grows older.

Back a decade or two, when unsettled portions of the country were being settled, the dependence upon the export branch of trade was necessarily much less than it is at present. Now the country is what might be termed settled; at least, there are no arable lands of any importance to be opened up.

In the meantime the manufacturing industries have developed in a manner unparalleled in history. But they have developed at such a rate that the home market

has been glutted to an enormous extent for some years. And it is getting worse.

According to the last census, the products manufactured in the United States were valued at over ten billions of dollars. And a recent statistician, an American, by the way, has averred that as far back as January 1, 1893, the amount of manufactured goods in the United States for which no customers could be found was over three and a quarter billion dollars' worth, or more than 30 per cent. of the total output of 1891, the year of the last census.

These figures in regard to the unsold goods may not be even approximately correct. But there is no question in the minds of those who are at all conversant with trade matters that the factories of the United States are over-producing to an enormous extent.

We, in Canada, know it from personal experience. We know that during the past few years the United States has been flooding this market with its manufactured products. But Canada is not the only country which our neighbors have been using as a dumping ground. Into Great Britain have been sent lines of manufactured goods which five years ago would not have even been thought possible. Other countries have had a similar experience, only in a lesser degree.

In an attempt to relieve themselves of the uncomfortable excess of manufactures, the business men of the United States have been heroically engaged for some time. With this object in view they have organized associations, sent out agents to foreign countries, and organized excursions of buyers

from foreign countries to the United States. Only this very month has been witnessed an excursion of business men from Central and South America; and these guests have been taken from one end of the United States to the other and feasted and entertained.

But just as the need of a foreign market for the surplus manufactures of the United States increased so developed the ludicrous desire for hostile tariff legislation, the climax of which is to be seen in the Dingley law which received the approval of President McKinley on Saturday last.

The United States is to-day in the position of a man who, while holding in one hand a commodity which he desires to sell to another man, has in the other a sword with which he proposes to cut off the hand of the customer the moment it is extended in an offer to sell him some of his products.

As a result of this hostile and unbusinesslike policy the United States is fast becoming an Ishmaelite: its hand is against every nation and every nation's hand against it. Witness the attitude of Germany, Austria-Hungary, Japan and other nations, let alone ourselves, whom the United States appears to have taken special pains to irritate.

If a nation desires to sell it must be willing to buy. Business is still barter. And nations who have goods to sell must, like individuals, study to earn the good-will, and not the ill-will, of those whose custom they are anxious to secure.

If a merchant's stand is poor it is only natural he should fall.

HANDLING FISHING TACKLE.

IT is rather surprising that hardwaremen, as a rule, pay such little attention to fishing tackle.

Fishing is a pastime which is confined to no one class. The shoeless urchin is as great a devotee to it as the wealthiest citizen. The only difference between them is as to the necessary paraphernalia, the extent of that difference being regulated by the depth of their respective purses.

Lovers of the piscatorial art are not confined to any one city, town or village. On the contrary, there is not a settlement in the Dominion that has not its disciple of Isaac Walton.

There is therefore no excuse for hardwaremen anywhere for not devoting such attention to fishing tackle as shall be commensurate with the capabilities of their respective localities.

By judicious planning and bright methods there is probably not a hardwareman in the country who cannot cultivate a nice little business in fishing tackle.

Judicious planning and bright methods do not end with the purchase of the necessary stock. They have merely begun. Where these are needed to be most exercised is in the ways and means of selling the goods.

Window dressing is something which demands particular attention. If utilized as it should be, there is nothing that can surpass it as a trade-drawing factor. And if it is true of anything it is true in regard to displays of fishing tackle.

Poles, nets, rods, lines, spoons, hooks, etc., can be made to form an excellent combination. Then, whenever an extra large fish has been caught with tackle supplied from that particular store, it should, if possible, be displayed for a short time, and the fact dwelt upon that it was with tackle furnished by you that it was landed. Perhaps, too, a prize of some kind might be occasionally given to the fisherman who, with your material, caught the largest fish within a certain period. In fact, there are many ways which might be devised to keep up the interest in the sport in your locality.

Newspaper advertising should, of course, not be overlooked, and in this, as in the window displays, every legitimate ingenuity should be exercised to make the "ads." bright and attractive.

It would also be well to keep an eye on persons going away on holiday trips and impress upon them the advisability of taking with them at least a rod, line and hooks. The advertisement should occasionally be prepared with a view to catching the trade of this particular class.

There is money in the judicious handling of fishing tackle, and those who have not yet made any effort in this direction should do so without delay.

IT IS THE BEST WHO SUCCEED.

IT is only the best who climb to the top in business to-day. And it is demanded that the best of to-day shall be a great deal better than were those who were thus termed yesterday. This is in keeping with the spirit of the times, which demands a higher standard of qualification for everything—except, perhaps, politics.

Best is not the gift of genius. It is the product of the will. Everyone, therefore, who has the will can earn a place in the ranks of the best.

Of course, the man who has no adaptation whatever for business can hardly be expected to qualify high for that which Nature never intended him. We are presuming that there is adaptation.

The foundation of success in whatsoever avocation a man may engage is education.

There is, first of all, the knowledge to be acquired that will enable him to read, write and figure. And then there are the elementary lessons in the business, or any other calling in which he engages, to be mastered.

The great majority of the failures in business to-day are due to the fact that there are so many engaged in it who have had no training for it. And the trouble is that a good many of those thus situated know everything. They know so much that they do not even require a trade paper.

In the sphere which it has pleased themselves to call themselves they twirl around for a while and twirl out of it again, sadder if not wiser men.

Training is needed for the shop every bit as much as it is for the bar or the surgery, and the sooner this is recognized the sooner will there be a better class of business men and a healthier business done.

THE U. S. INDUSTRIAL SITUATION.

THE industrial situation in the United States iron and coal-producing regions possesses direct interest to Canadian iron buyers. They, no doubt, will be satisfied to learn that, barring the bituminous coal miners' strike, it may be said to be somewhat better than it was a week ago. The sheet scale of the Amalgamated Association has been signed, and, in consequence, a large number of men are assured employment. Besides this, firms in the Pittsburg iron and steel district have signed the finishing scale. It is expected that other firms will follow this example. With regard to the coal strike there are no changes of importance. Some of the miners in West Virginia were induced to join in the movement, but they have not done so. Disorderly conduct has been reported from West Virginia, Ohio, Illinois, and some of the Pittsburg operators seem to be getting impatient and have announced that they are tired of seeing their contracts go to other fields. They will therefore put their mines in operation unless the other mines are stopped from supplying coal to their customers. Western railways have been confiscating coal shipped over their tracks, but are paying good prices therefor. Shut-downs have been necessitated in Missouri, Illinois, Ohio and Indiana, because they will not pay the high price demanded for coal, while others have commenced to use oil for fuel.

It is the practical, not the theoretical, advertising which pays.

LIGHT STOCKS OF HEAVY GOODS.

There has been no replenishment of the stock of terne plate during the past week and the market is even barer of stock than it was. In fact the last round lot offering in Montreal was closed out this week, so that jobbers cannot restock if they run out until fresh shipments are received from the other side. There are some moderate shipments on the way which are due at Montreal in the course of a week or ten days, but they are all sold to arrive. The heavier gauges of Canada plate, sheet iron and charcoal tin plate are all scarce also and values on them are firmly held. In fact, it seems to be the general report that stocks of heavy iron and metals are much lighter in Montreal than is usual at this period of the year.

A BUSINESS PROPOSITION.

THE daily papers in Montreal of late have devoted considerable space to the relative merits of the different plans by which it is proposed to increase the harbor accommodation at the metropolis. The Witness and La Presse, especially, are at it, hammer and tongs, the former accusing the latter of raising the race cry irrespective of the merits of the case in order to have its own schemes carried out. This journal, as a commercial paper, does not presume to know anything about the engineering merits of either plan. Common sense, however, makes it clear that the mercantile centre of the city is situated most conveniently to the western end of the harbor. All the big manufacturing and milling concerns lie around the Canal, as do also the grain elevators, while the produce cold storage warehouses are in the same district. Now, the accommodation at the western end of the harbor is notoriously deficient. It does not require a civil engineer to see this, or to know that it can be remedied. Three

well-known engineers, gentlemen who certainly know their business, drew up a plan known as No. 6 several years ago. This plan provided for increased piers or docks in the western portion of the harbor. No one found fault with it for years after it was submitted; not, in fact, until last spring, when the present Minister of Public Works, Mr. Tarte, suddenly discovered that it was all wrong. He and his engineer, Mr. Coste, are the only ones who say so. The shipping men, who certainly ought to know what they are talking about, do not agree with Mr. Tarte or his engineer. They want the facilities of the western end developed and extended to their utmost capacity, as provided for in plan No. 6. When this has been done they are quite willing that the eastern end of the harbor should be exploited, but not until then. Mr. Tarte wants to cut the money in two and spend a little on both ends. This, no doubt, is good politics, but to a plain trade paper, the business-like way would be to complete one job, and that the most necessary one, thoroughly, before commencing another.

THE NEW CANADIAN TARIFF.

As promised some time ago, we this issue reproduce, in alphabetical order, the new tariff of the Dominion, which contains the changes as finally made by Parliament. The commencement of it will be found on page 16.

Business men should take particular pains to preserve this issue of **HARDWARE AND METAL**.

A PAINT REMOVER.

Machines for painting large surfaces have now been in successful use for some time, their first extensive employment being, if we remember rightly, for the decoration of the World's Fair buildings at Chicago. In these machines the paint is projected in a fine spray by means of an air blast. It is rather curious, says an exchange, that a machine on this same principle is now being used for removing paint from metallic and other surfaces. This latter machine is, in reality, a sand-blast apparatus which by simple attrition will remove paint at the rate of one square foot in two minutes. A United States cruiser has recently had the whole of her hull cleaned by this method.



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FIRE-ARM MANUFACTURE.

THE following is a continuation of a series of articles which appeared in Hardware Trade Journal :

The barrels may be considered to be the most important factor, being the tube through which the charge is fired. Gun iron used in the manufacture of the barrels is a selection of the finest grades of raw material forged, drawn or rolled out into rods; the steel with which it has to be united undergoing a similar treatment. The rods are now done up in bundles, consisting of a certain number of rods of iron to a certain number of steel rods, the proportion being ruled by the quality of barrel required.

The bundles then undergo a process of reheating and welding into one rod or bar, afterwards rolled or hammered out into a thinner bar. They are then cut again, the same process is repeated, this time the bundle being rolled out into thin, narrow ribbon. The process is again repeated by laying several of these flat strips together and welding into one rod, which is then rolled into a ribbon for plain twist barrels, or into square rods for Damascus barrels, varying in thickness, etc., according to the requirements of the next process. The various processes of heating and reheating in the manufacture of these barrels constitute a great waste of material, and considering that they have to undergo a further process of several more heatings, borings and cuttings, it is no wonder that in a first-class Damascus barrel there remains only about 25 per cent. of the original material for the last processes, which again reduce it. The cheapest form of twist barrels are those called skelp twist. They are made of the commonest gun iron rolled in flat, ribbon-shaped strips, or scelps, or skelps, and they are usually termed, when in their finished state, "skelp twist barrels. These ribbons, or skelps, are heated and wound spirally round a mandril, several lengths being used to form the full length required in the barrel, varying to the thickness and weight needed.

The coils thus made are united by further welding, the spiral edges being closed, making a perfect joint by the same method. The tube then undergoes much hammering to increase the density of the barrel, the barrel being then finished as far as the barrel welder is concerned. A skelp-twist barrel, when finished and browned, has a figure or pattern, consisting of narrow lines, light and dark alternately, which run spirally round and round the barrels from breech to muzzle.

The barrel making is a distinct branch of the gun making and only a limited number of gunmakers turn out their own barrels, so that all gunmakers must not be confounded

as being barrel makers. The different terms under which this barrel is sold are : The skelp twist, fine twist, English twist, thread line, hair line, real twist, etc. The best suited for technical purposes being the skelp twist, and the best known amongst sportsmen being perhaps the phrase "Fine English Twist." Considering the pressures that are brought to bear on the inner surfaces of these barrels, it will be at once visible that the many processes have greatly increased its strength and ductility; but, great as is its strength, it bears a poor comparison to the Damascus barrel.

THE DAMASCUS BARREL.

Of these there are several kinds, but all are made on one governing principle; the Damascus and laminated barrels differing only in the method of connecting the iron and steel in the first process. The rods differ from the former (the skelp twist), being received in square or rectangular form instead of flat, and are taken separately and heated.

For the single iron Damascus a square rod about four feet long and five-eighths thick is taken, and placed in a forge fire until about 18 inches is heated to a red heat, one end then being fixed into a square hole in a block made fast to a frame, the other being gripped by a revolving head at the other end of the frame. A revolving motion is then given to the movable head by means of a winch-handle and cog wheels; the rod being square cannot turn round with the head, so is twisted on itself into a spiral form. Great judgment is required, so that the twists are kept even and close, requiring several more heatings before this is accomplished. The processes for all Damascus barrels are similar up to this point.

The term Damascus twist has originated from this twisting process.

The cheaper quality laminated steel, which is also known as single iron or Birmingham Damascus barrels, are made by taking the rod in its twisted state and rolling it out into a ribbon, which is then coiled on a mandril and welded together; the difference of the figure or pattern from a skelp twist being that the lines are bolder and more wavy, with a distinct line running round the barrel from breech to muzzle.

For two-iron Damascus or laminated steel barrels, two twisted rods, each three-eighths square, are taken in their twisted state and welded together throughout their length, and then rolled into the ribbon shape required, with the twisted spirals in opposite directions. The pattern figure obtained differs from the preceding barrels, being more developed, and the grain and fibre of the metal is correspondingly strengthened by the process.

This quality of barrel is very popular with the public and gunmakers. For three-iron

or three-stripe Damascus, three rods are used; these are welded together in the same manner, and then rolled into a ribbon, thus producing a still closer pattern and a barrel of greater strength. Four rods are but rarely used. As many as six rods are sometimes used in Belgian barrels, but the over-twisting rends apart the fibres of the iron, thereby weakening the barrels. These barrels are not held amongst sportsmen in such high repute as Birmingham barrels, being made of softer material; but little steel is used in their composition, the figure being frequently obtained by using two different preparations of iron instead of iron and steel; they are not therefore advisable for full choking. Three-iron Damascus barrels are seldom exceeded by English makers, but in the finest grade of guns the barrels are made of crolle or silver-steel Damascus ribbon, in which either three or four rods are used. Those of a higher quality metal are twisted from rods of a smaller size, thereby producing a fineness and beauty of pattern unequalled by any other barrel in the world.

GREENER'S WROUGHT-STEEL BARRELS.

These barrels are often preferred to Damascus, as they will stand more hard work and are less liable to "greys." The grey in gun barrels is a defect of small importance, but is decidedly a blemish on a fine weapon, and is distinctly an eyesore in a figured gunbarrel. They are formed of the burnt metal (or scale), and are caused by the many twistings and weldings of the gun-iron and ribbons, and sometimes they are embedded within some of these welds, in which in the finished barrel this fragment of scale forms a "grey" or small speck of useless material, which will not color or harmonise with the other portions of the barrel, and becomes more visible after being polished and browned.

It must not be imagined that greys weaken a barrel to any appreciable extent, and their development in a gun after some months' or years' wear in no way reflects upon the reputation of the gunmaker. A knock against any hard substance sideways will frequently dent one barrel and break the weld in the other, thus proving one of the most frequent causes by which a gun is ruined.

More barrels are ruined by hard knocks than by hard wear.

The Greener's wrought-steel barrels have many other advantages—the bruises are more easily raised, the barrels are less easily rusted, and they are not so liable to honeycomb at the breech, and the browning or coloring is more lasting.

These wrought-steel barrels are made of a solid bar of forged steel of a homogeneous metal of the finest quality, specially adapted for gun-barrels by its great tenacity or tensile

strength, and drilled its whole length. They are absolutely reliable, as there is no danger of overheating, and the proof-house tests discover no weaknesses arising from an inherent defect in the metal, such as would result from a blow-hole in the raw ingot of cast steel. There is no fibre, and the absence of rolling and drawing processes precludes the possibility of the finished barrel having a "cold shut" or similar defect.

They have been thoroughly tested by the inventor, as well as at the Government proof-houses, with very heavy charges—28 drachms of powder and $4\frac{1}{2}$ oz. of shot; this being about seven ordinary charges of powder and four of shot. This and many other tests it withstands perfectly.

These barrels, then, compare very favorably in strength for all practicable purposes, and are only at a disadvantage in appearance when compared with twisted Damascus and laminated steel barrels. These barrels differ from the old type of "cast-steel" barrels in that they bulge instead of breaking, and that increased strain produces an open burst similar to that of a welded barrel, instead of a sharp break or a longitudinal rip, as is found to be the result with imperfect steel barrels. The quality metal which this maker puts in these barrels is such that they will stand successively more than double the strain to which a sportsman can submit his gun with fair usage. It will neither rip nor crack, however sharp may be the explosive used, and are known by the trade mark, namely, an elephant in connection with the words "Greener's wrought steel."

SIEMENS' STEEL.

The following is the most common process of manufacture in England: A piece of steel about ten inches long, with a diameter of two inches, is taken, and a hole drilled through it. It is then heated and passed through rolls, and drawn out to the required length. These barrels are fairly reliable, but they stand the danger of getting overheated, which deteriorates the metal, and also, should a speck appear in the commencement, the process of rolling produces a very fine split, imperceptible perhaps; but it is a serious fault, and may cause a burst. The method of manufacturing steel barrels, which is more reliable, is to forge out the metal into a solid rod, and afterwards drilling it the full length: this is a method used by many gun-barrel makers.

BARREL BORING.

This may be divided into three processes—rough and fine boring and polishing. When barrels are drawn or rolled out solid the following processes are added to that of drilling through the metal in the first place: Rough boring: after a hole has been made

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through the metal a revolving square bit is driven through. These bits are much longer than the barrel, and are slightly tapered towards the end which enters first. The length of the bit as it enters the tube causes it to keep true and straight. The process is similar to a riming out of a hole the length of the bit, forming its own guide, resulting in a tube, which is nominally straight, but in reality far from it. It is again repeated with bits of a larger size, producing the desired result. Fine boring is similar to the former, only a very much shorter boring bit is used, which is packed from the back, keeping the cutting edge up to the metal; one edge only is ground for cutting, which differs from the former bit, being perfectly true, the opposite edge is rounded. To keep this bit in place a guide is put in the end of the barrel, keeping it in position as it travels further into the tube.

POLISHING.

This is executed by means of a leaden plug (surrounding an iron rod), being a perfect fit with the barrel when in its fine-bore condition. This rod is kept rapidly revolving in the tube, being fed with emery and oil on its surface, resulting in a polish as bright as a mirror. By this process are produced what are known as cylinder-bore

barrels; but, as a rule, the up-to-date sportsman is not content with a gun unless it will produce a closer pattern than is generally produced by a cylinder-bore barrel, he requiring a gun with one or both barrels so bored that a greater number of shot pellets may be placed within a given area; and to obtain this the barrel-borer proceeds with one of the many systems of choke-boring. What is meant by a choke bore is that the diameter of the barrel is reduced at a point about three inches from the muzzle by about two gauges. Many systems have been tried to obtain this end, but the greater number of barrels are turned out on one of the following systems: The first, which is by far the cheapest and simplest, is that of compressing the already cylinder-bored barrel, and so producing a choke bore. This method will last fairly well as long as the barrel is not subjected to a hard day's shooting. The second and better method is to bore the barrel two gauges smaller than is required. Say, for example, a 12-bore choke barrel is needed. The barrel would then be bored to a 14-gauge and further bored to a 12-gauge, the full length of the barrel, save the last three inches. At this point it is reduced by a tapered shoulder till it reaches the 14-gauge, the remainder being left per-

fectly straight. There is also a system of recess choking, but this is not held in a very high repute by sportsmen. These are practically the only methods now in use.

The following is the best plan for ascertaining whether a barrel is or is not choked: Reverse the barrels and look through from the muzzle end (having the breach open), if the tube is choked rings will be at once observed near the muzzle, giving a slightly shaded appearance, and breaking the direct line of light; if it should be a cylinder barrel these concentric rings are not visible.

Should you wish to know the amount of choke, you at once dismount the barrels from the gun, and examine the figures given in the proof mark of that particular barrel, which show to what extent the choke has been bored. These figures are stamped on the barrels at the proof house, the barrel-borer having nothing to do with this marking, so that they may be thoroughly relied upon. When examining the inner tubes of the barrels you should be careful never to hold the barrel in such a position that you are looking through direct to the light, but should be turned towards the light; when using a gas or lamp the barrel should be so held as to avoid the flame itself. By this method the glare and direct reflection is reduced, which is not only injurious to the eyes, but may produce very deceiving results; for should a barrel be tinged with rust

be used. The method for detecting any irregularities is the same as just described. If, upon looking down a barrel, there is a break in the rays of light or that they deviate from a perfectly straight line, causing a shadow, it is at once visible that the barrels are out of truth. This is the more observable as the barrels are revolved. When actual tests are made the light is allowed to travel down one side only. By this means the shadow is more perceptible, there being no reflected light to counteract it. To straighten a barrel it is held on a shaped anvil and blows are given on the outside of the barrel. After the barrel has been straightened the outside is shaped to the required diameter and thickness. It is then fixed in a lathe, and at different points in its length shavings are taken off to a gauge forming sunken rings round it. These form guides for the grinder and barrel filer, in whose hands it is next put, and after leaving them should be well shaped, smooth, and but little requiring to be done to its outer surface.

AN IMPROVED ELBOW.

WE are told that the Athenians of ancient days "spent their time in nothing else, but either to tell or to hear some new thing." In our day and generation we do not spend our time in telling or hearing of some new thing, but there are a great many manufacturers and merchants who are spending a great deal of time in inventing new articles, improving others, or in devising ways and means of extending trade. It is right they should; it would be wrong if they did not. If they did not there would be retrogression.

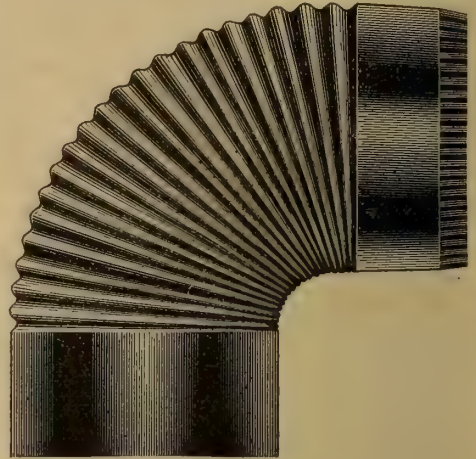
During the last two or three years the Kemp Manufacturing Co., of Toronto, has been industriously trying to devise a one-piece stove-pipe elbow, which would possess a fine appearance and take the place of the pieced elbows now on the market. And their efforts have at last been rewarded beyond their expectations.

A few days ago I paid a visit to the company's factory and witnessed the operation of turning this new elbow out. About nine machines, each having its particular office, are employed in the operation, and the elbows are turned out at an astonishing rate.

This new one-piece elbow is decidedly handsome, as will be observed from the accompanying cuts, but its chief feature is not its beauty: it is its strength. The trade mark which the firm has adopted is an

elephant with an elbow under each foot. I do not know whether the elbow would stand the weight of an elephant, but I know I jumped upon it without even creating a perceptible spring. I also saw a 200-pound man do the same thing with a like result. The elbow, I was informed, will stand a pressure of 500 pounds. The secret of this strength is the crimp.

On account of its extraordinary strength not only will it wear well, but it is next to



No. 2.

impossible to damage it in shipping. The elbows are put up one dozen in a crate, and can be tossed, kicked or rolled about without danger of damage.

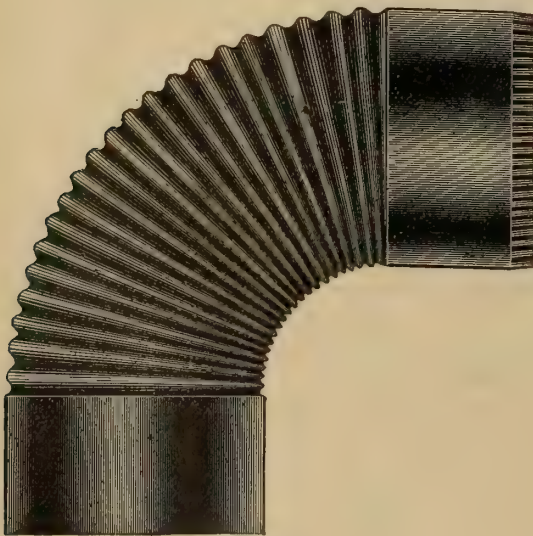
Through the improved process employed in the manufacture of this elbow a short curve or turn is secured, necessitating thereby the use of less material, which, of course, means in turn a reduction in freight and less cost to the buyer.

The elbows are made in Nos. 1 and 2 qualities. No. 1 is made of extra heavy smooth iron with long ends, and the No. 2 of ordinary iron with half-inch shorter ends. The latter, while presenting a much better appearance than the old-style pieced elbow, can be sold at about the same price. All elbows are rivetted and ready for use, and are treated with a coating which prevents rust.

Not only the elbow, but the machinery as well, is the invention of the Kemp Co. and was made upon the premises. Patents have been taken out in both Canada and the United States.

Kemp's one-piece elbow is designed to revolutionize the trade in Canada in this particular line. Already orders are coming in rapidly, and the machines are kept busy supplying the demand. The Kemp Manufacturing Co. is entitled to congratulations.

By an excusable error in our issue of the 17th inst. we gave the address of the Clayton Air Compressors Works as 36 Cortlandt St. It should have been Havemeyer Building, Cortlandt, Church and Dey streets, New York.



No. 1.

at or close to the end it would be completely lost to sight by the glare of the other portion of the barrel.

BARREL STRAIGHTENING.

After the fine-boring process the barrels require straightening. This may seem strange. But, although the greatest care is taken and the finest tools and experienced skill is used, a barrel never leaves the borers in a sufficiently straight condition to

H. S. HOWLAND, SONS & CO.

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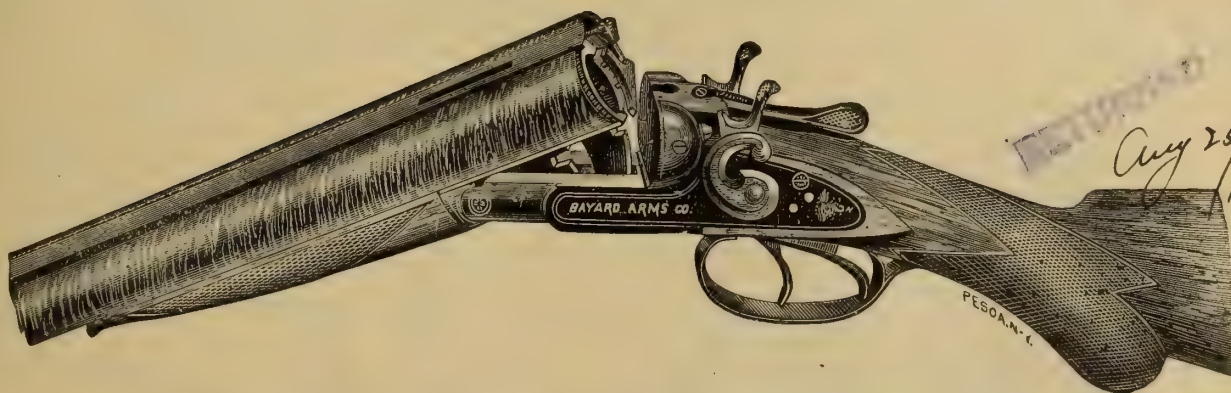
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COMPETITION IN EDGE TOOLS.

CONTINUING his interesting research, the Commissioner of The Iron-monger in Sheffield says in a current issue in regard to "What Sheffield can do in Edge Tools":

We have arrived at a branch of our subject where competition is to be more open, and therefore more fair, than in some other departments of Sheffield industry. The French are more honest in their dealings than their near neighbors and bitter foes, the Germans, and do not aim at an imitation which has fraud as its basis. It is pleasant to turn to a phase of commercial rivalry which depends upon straightforward business acumen for its success, and which scorns the meannesses and trickeries of an imitated label or trade mark. The reason why there is so little outcry on the subject of French competition in the edge tool trade is because of the chivalrous regard of the Gaul for trade decencies. We believe that in South America, where French edge tools find a sale, German traders do not hesitate to copy their neighbors' marks, and do not fail to emulate those little niceties of packing and parcel-tying which distinguish the productions of rival firms in the eyes of a Spanish-speaking population far more than the wording of a label.

During the past three years there has been

a great revival in edge tool manufacture in Sheffield. At the present moment good workmen are found only with difficulty, and it appears that, unless machinery is introduced, it will be all but impossible to increase our productive power in this department. Five years ago the Indian market was subjected to a sustained and severe assault from Germany, but the sterling material of the Sheffield firms has "told" in the long run, and the trade of this important market is rapidly returning to Sheffield.

There are evidences to show that, had it not been for the Indian famine, business would be so brisk that the market could not have been supplied easily from Sheffield. Machinery is not used in the production of Sheffield edge tools at present, but it is doubtful whether the trade will long remain in this condition. Already several manufacturers are attempting to discover a substitute for hand forging in consequence of the endeavors made by a section of their workmen to obtain an advance in wages. Plans have been prepared, and if the machinery will do the work required of it the methods of production will be revolutionised. Add to this a sharp demand and a growing trade, and it will at once be seen how nearly this trade has approached the utmost limit of its productive power under existing conditions.

Toronto's Greatest Celebration.

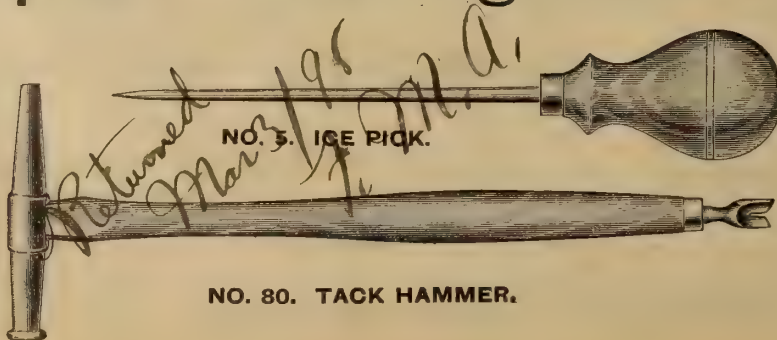
FULLY alive to the times, the management of the Toronto Exhibition, or, as the title runs this year, "Canada's Great Victorian-Era Exposition and Industrial Fair," is to be conducted on a scale, from August 30th to September 11th, that will even transcend any former effort made to promote this, the most popular, most comprehensive and most attractive annual show held on this continent. Already a sufficient number of applications for space and of notifications of entries have been received to warrant the highest expectations. The management have increased the number of medals to be awarded, and have made many improvements to the buildings and grounds, showing that they are resolved to leave nothing undone that will enhance the pleasure and comfort of both patrons and exhibitors. They have also determined on a special feature that promises to prove the greatest outdoor spectacle in the way of entertainment that Toronto or any other city has ever known, outside the world's metropolis itself. This spectacle will take the form of a reproduction of the wondrous Diamond Jubilee procession in London. Agents are now across the water hiring and buying the necessary properties and costumes, which will be an exact replica of the uniforms and costumes worn by the soldiery, the sailors, the nobility and the Yeomen of the Guard in the magnificent procession. Scenes will also be reproduced of the ceremonies at Buckingham Palace, St. Paul's Cathedral and other places along the line of route. Many interesting specialties will also be introduced, while at night the effect will be heightened and magnified by brilliant illuminations and fireworks. Not only will spectators have brought home to them the grandeur and unity of the Empire, but they will be practically taken home to Old London. While dwelling on this grand feature the material aspect of the Exhibition must not be lost sight of, therefore it is well to mention that entries of live stock, and the majority of the departments, close on Saturday, August 7th. Programmes containing all details of the attractions will be issued about the 10th of August. (adv't.)

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Handsomely Nicked and
Attractive in Appearance.

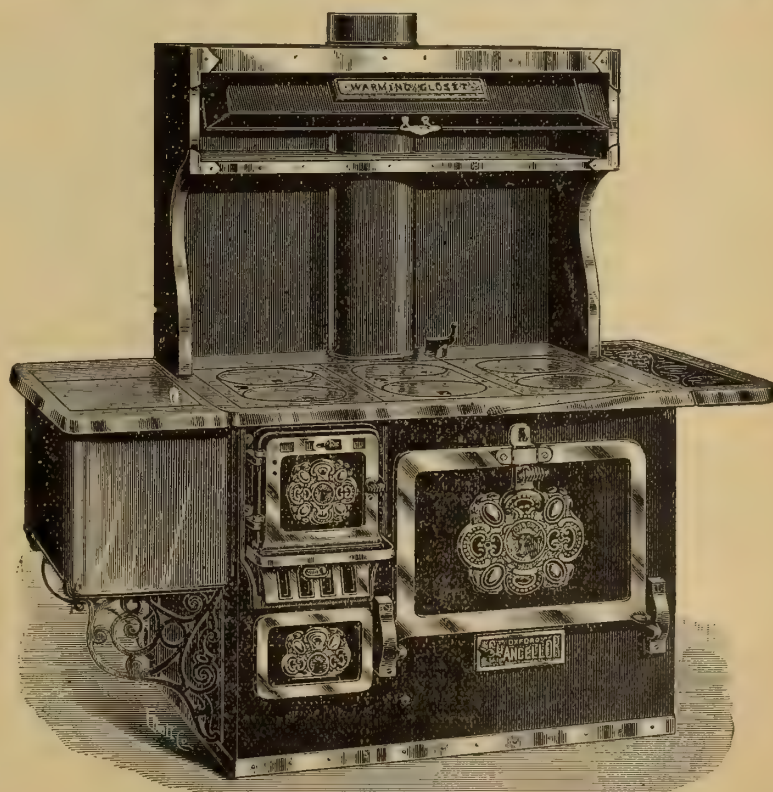
Large Oven
Drop Oven Door
Oven Plates Asbestos Lined
Large Fire Box
Fire Back Extra Heavy
Fire Back in One Piece
Dump Centre Grate
Large Ash Pan
Loose Interchangeable Top

NOTE.—An additional draft slide is placed at top of
fire door, and by means of an inside shield the draft is
conducted down and introduced at bottom of fire box,
controlling the fire, and making THE CHANCELLOR the
most economical wood-burner in the market. Reservoir
can be attached or detached in five minutes.

CAN BE SUPPLIED WITH COAL FITTINGS.

The Gurney Foundry Co., Limited, Toronto

THE GURNEY-MASSEY CO., Limited, MONTREAL.



Cooking Surface, 39 x 30 in.
Oven, 20 x 22 x 14 in.

Fire Door, 8½ x 7½ in.
Fire Box, 28 in. long.

NEWLY INCORPORATED.

THE Oriole Gold Co. of Wabigoon and Saw Bill Lakes, Limited, has obtained a charter.

The Victoria (B.C.) Power Co. has been incorporated.

The Electric Supply Co. of Hamilton, Limited, has been incorporated.

The Cheticamp Gold Mining Co., Limited, Halifax, has been incorporated.

The Boissevain (Man.) Trading Co., Limited, has been incorporated.

The Lunenburg Foundry Co., Limited, Lunenburg, N.S., has been incorporated.

The Schultz Bros. Co., Limited, builders, Brantford, Ont., have obtained a charter.

The T. G. Rice Wire Manufacturing Co. of Toronto, Limited, has obtained a charter.

The Lake Winnipeg Gold Mining Co., Limited, Selkirk, Man., has been applying for incorporation.

The George White & Sons Co., Limited, manufacturers of engines, London, Ont., have obtained a charter.

THE DRIFT OF CANADIAN TRADE.

Some interesting statistics are given in connection with an article on "Canada's Progress in the Victorian Era," which appeared in a recent issue of CANADIAN HARDWARE AND METAL, showing the relative growth of Canadian imports from various sources. These tables show that it was high time to take some step to encourage trade with the Mother Country, if the United States were not to supply the bulk of the Dominion's wants. The imports from Great Britain in 1837 were valued at \$11,200,000, which had increased to \$31,131,737 in 1895. Canadian imports from the United States were of the value of \$1,300,000 in 1837, but in 1895 had reached the imposing figure of \$54,634,521. Moreover, the imports from the United States show an ever-growing quantity, while those from the United Kingdom were considerably larger in 1887 than in 1895. The preferential tariff introduced by Sir Wilfrid Laurier is designed to reverse this tendency to gravitate commercially, at least, into the arms of the big Republic on Canada's border, and it is deserving of every possible encouragement from the Mother Country. — The Hardwareman, July 10.

KEMP'S NEW WAREHOUSE.

Business is neither decreasing nor stationary with the Kemp Manufacturing Co., of Toronto. On the contrary, it is increasing. Evidence of this is seen in the fact that the company has recently found it necessary to erect another large warehouse in the block on which stands its factories, warehouses and offices. This new warehouse is of red and white brick and is five storeys high, with a frontage of 65 feet and depth of 125 feet. It fronts on River street and is connected with the works by a long bridge and to the other warehouses by enclosed passages.

THE DINGLEY AND WILSON TARIFFS.

COMPARATIVE RATES IN THE TWO BILLS.

Articles.	Old Rate of Duty.	New Rate of Duty.
Boracic acid.....	3c. per lb.	5c. per lb.
Salicylic acid.....	Free of duty.	10c. per lb.
Alcoholic perfumery, including toilet waters...	\$2 gal. and 50 p. c.	60c. lb. and 45 p. c.
Alkalies and alkaloids, and their combinations	25 per cent.	25 per cent.
Argols or crude tartar.....	Free of duty.	1c. per lb.
Bleaching powder.....	Free of duty.	1-5 of a cent per lb.
Coal tar colors or dyes.....	25 per cent.	30 per cent.
Opium, crude or unmanufactured.....	Free of duty.	\$1 per lb.
Chlorate of potash.....	Free of duty.	2½c. per lb.
Medicinal preparations containing alcohol....	50c. per lb.	55c. lb., but not less than 25 per cent.
Medicinal preparations without alcohol.....	25 per cent.	25 per cent.
Soda ash.....	¼c. per lb.	¾c. per lb.
Roman, Portland and other hydraulic cements	8c. per 100 lbs.	8c. per 100 lbs.
China clay or kaolin.....	\$2 per ton.	\$2.50 per ton.
Plain white earthen and crockery ware.....	30 per cent.	55 per cent.
China, porcelain and other ware, decorated..	35 per cent.	60 per cent.
Glass, cut, engraved or painted.....	35 per cent.	60 per cent.
Common window glass, not exceeding 10 by 15 inches square.....	1c. per lb.	1¾c. per lb.
Cast polished plate glass, silvered, not exceeding 16 by 24 inches.....	6c. per sq. ft.	11c. per sq. ft.
Marble, in block.....	50c. per cubic ft.	65c. per cubic ft.
Iron in pigs.....	\$4 per ton.	\$4 per ton.
Bar iron, not less than one inch wide nor less than three-eighths of an inch thick.....	6-10 of a cent per lb.	6-10 of a cent per lb.
Ties for baling cotton.....	Free of duty.	5-10 of a cent per lb.
Tin plate, lighter than 63 lbs. per 100 sq. ft..	1 1-5c. per lb.	1½c. per lb.
Penknives or pocket knives, valued at not more than 50c. per dozen.....	25 p. c. (up to 30c. value) and 12c. per doz. and 25 p.c.	40 p.c. (up to 40c. in value) and 12c per doz. and 40 p.c.
Copper plates, bars, ingots or pigs.....	Free of duty.	Free of duty.
Lead contained in silver ore.....	¾c. per lb.	1½c. per lb.
Machinery.....	35 per cent.	45 per cent.
Boards of hemlock, white pine, etc.....	Free of duty.	\$2 per 1,000 feet.
Toothpicks.....	35 per cent.	2c. 1,000 and 15 p.c.
Furniture, cabinet or house.....	25 per cent.	35 per cent.
Sugar, not above No. 15 Dutch standard....	40 per cent.	95-100c. lb. at 75 deg and 35-100c. for each additional deg
Tobacco suitable for cigar wrappers.....	\$1.50 per lb.	\$1.85 per lb.
Tobacco, for filling cigars.....	35c. per lb.	35c. per lb.
Cigars and cheroots.....	\$4 lb and 25 p.c.	\$4.50 lb. and 25 p.c.
Hogs.....	20 per cent.	\$1.50 per head.
Horses, valued at \$150 or less.....	20 per cent.	\$30 per head.
Rice, cleaned.....	1½c. per lb.	2c. per lb.
Wheat.....	20 per cent.	25c. per bushel.
Wheat flour.....	20 per cent.	25 per cent.
Butter.....	4c. per lb.	6c. per lb.
Milk, fresh.....	Free of duty.	2c. per gallon.
Eggs.....	3c. per doz.	5c. per doz.
Hay.....	\$2 per ton.	\$4 per ton.
Potatoes.....	15c. per bushel.	25c. per bushel.
Mackerel, pickled or salted.....	¾c. per lb.	1c. per lb.
Oranges and lemons.....	8c. per cubic ft.	1c. per lb.
Pineapples, in barrels and other packages....	20 per cent.	7c. per cubic ft.
Beef.....	20 per cent.	2c. per lb.
Salt, in bulk.....	8c. per 100 lbs.	8c. per 100 lbs.
Champagne, in quarts.....	\$8 per dozen.	\$8 per doz., but no separate duty shall be levied on the bottles.
Still wines, in quarts.....	\$1.60 per dozen	\$1.60 per dozen.
Malt liquors, in bottles or jugs.....	30c. per gallon	40c. per gallon.
Mineral waters, natural, in quarts.....	Free of duty	30c. per doz. bottles.
Cotton yarn, up to and including No. 15, valued at not exceeding 25c. per lb.....	3c. per lb.	3c. per lb.
Cotton thread, on spools.....	5½c. per doz.	6c. per dozen.
Cotton cloth, not exceeding 50 threads to the square inch, not bleached nor dyed.....	1c. per square yard.	1c. per square yard.
(Nearly all the duties on cotton cloth, except the finest grades, are the same under both Acts.)		
Corsets, not elsewhere specified.....	40 per cent.	50 per cent.

Articles.	Old Rate of Duty.	New Rate of Duty.
Ready-made clothing of cotton.....	40 per cent.	50 per cent.
Cotton hosiery, valued at not more than \$1 per dozen pairs.....	50 per cent.	50c. doz. and 15 p.c.
Shirts and drawers, valued at not more than \$1.50 per dozen.....	50 per cent.	60c. doz. and 15 p.c.
Hemp and tow of hemp.....	Free of duty.	\$20 per ton.
Floor mattings, including Chinese and Japanese valued at not more than 10c. per yard...	Free of duty	3c. per square yard.
Collars and cuffs of linen.....	30c. doz. and 30 p.c.	40c. doz. and 20 p.c.
Linen laces, embroideries, etc.....	50 per cent.	60 per cent.
Manufactures of flax containing more than 180 threads to the square inch.....	35 per cent.	9c. per sq. yd. and 30 per cent.
Wool of class 1.....	Free of duty.	11c. per lb.
Wool of class 2.....	Free of duty.	12c. per lb.
Wool of class 3, valued at not more than 12c.	Free of duty.	4c. per lb.
Wool of class 3, valued at more than 12c....	Free of duty.	7c. per lb.
Woolen dress goods, valued at not more than 70c. per lb.....	40 p. c. or 50 p. c.	11c. and 50 per cent.
Aubusson and moquette carpets.....	40 per cent.	60c. sq.yd. & 40 p.c.
Silk velvets and chenilles.....	\$1.50 per lb.	\$1.50 lb. & 15 p. c.
Silk laces.....	50 per cent.	60 per cent.
Wood pulp, mechanically ground.....	10 per cent.	1-12 of a cent per lb.
Printing paper, valued above 5c. per lb.....	15 per cent.	15 per cent.
Agate buttons.....	25 per cent.	1-12 of a cent per line per gross & 15 p.c.
Coal, bituminous.....	40c. per ton.	67c. per ton.
Hides of cattle.....	Free of duty.	15 per cent.
Pencils of wood and lead.....	50 per cent.	45c. gross & 25 p. c.
Coffee.....	Free of duty.	Free of duty.
Tea.....	Free of duty.	Free of duty.
Paintings and statuary.....	Free of duty.	20 per cent.

A MERCHANT FINED FOR LYING.

A lying advertiser ought to be punished. And it ought to be done now and not in the hereafter.

The difference between the ordinary liar and the advertising liar is this : The former may deceive, but there it usually ends ; the latter not only deceives but he robs. That is why he should be punished while in the flesh.

In this country we have no laws against the liar of the advertising type. Probably we are too advanced in civilization. There is one country, however, which has. That country is Germany.

A short time ago a merchant in one of the towns there advertised that his "entire stock consisted of the finest quality of brand new goods, and that it was utterly impossible for any house in town to come up to the price or quality of goods offered."

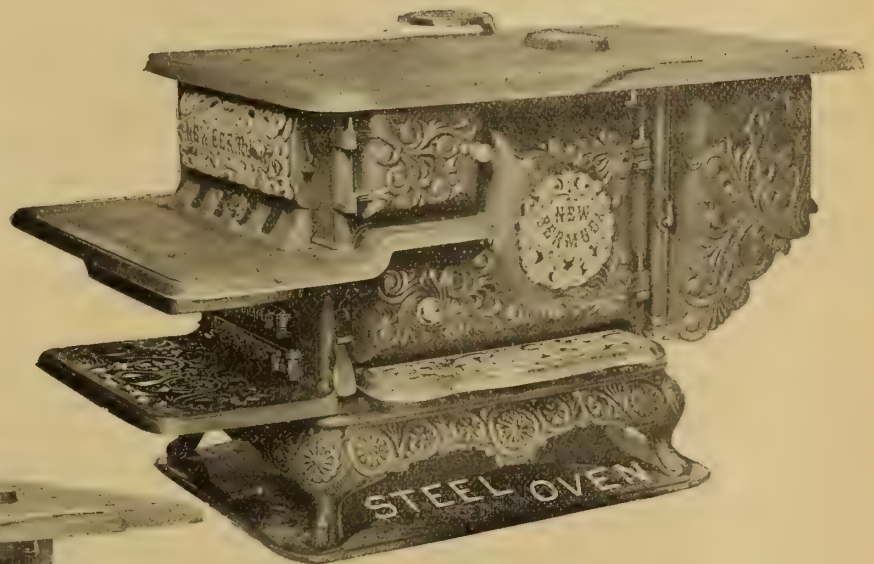
Another merchant in the town was of a dubious turn of mind. Perhaps he had "been there himself." He purchased some of the alleged extraordinary quality goods. And so confirmed was he in his doubts that he issued an information against his competitor, with the result that the latter had to pay a fine and shoulder all the costs.

But it pays to tell the truth, even where there is no law against untruthful advertising.

The ... New Bermuda

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



No. 926 Square and Reservoir
Takes 28-inch Wood.



The **NEW BERMUDA** possesses many features of utility and convenience not found in other Wood Cooks. Sold by all Stove Dealers.

Manufactured by...

The D. MOORE CO. Limited
HAMILTON, CANADA

Plumber and Steam-Fitter

THE EFFECT OF A JAR ON A HOT WIPE JOINT.

A SUBSCRIBER of The Metal Worker wrote that journal as follows: Kindly let me know, in order to settle an argument in our shop, whether a jar on a wiped joint, after it is wiped, is liable to make it defective. I hold that it is not, because there is still heat enough in the pipe to make the joint good again. A fellow workman holds that it will not run. I would also like to know if a light joint, well tinned, will give as good satisfaction as what is known in the trade as a heavy joint?

This was the answer: The best evidence that a joint which has been jarred cannot be relied upon is the practice among good workmen to invariably wipe over again a joint in which their confidence has been impaired through its being jarred. It is quite possible, if the jar occurs before the joint starts to set, that the heat still in it would be sufficient under some conditions to prevent any break or crack. If, however, the heat has passed off to such an extent that the metal has become partially set, it is possible that the jar, while not breaking the joint entirely off, will, under careful examination, show a weakened line of metal, or a line which would mark a point of separation if the joint were to be broken by tension.

As to the advantage of a light, well-made joint over a heavy joint made in the same manner, there can be no doubt but that the joint composed of the larger body of solder will not only stand a heavier pressure, but will also have a greater strength to stand any strains or rough usage to which it may be subjected. Some workmen who are particular in making their joints and are strongly inclined to neatness, overstep the line of safety in reducing the size of their joints. It is better to use a little more solder than is necessary than to run the risk of damage through a joint that is too light. However, a light joint well made of fine solder will stand well, but not every light joint met with is so made, hence the advisability of using plenty of metal.

IMPROVED TRADE.

Both the master plumbers and the supply houses report that this season's trade has been much ahead of that of former years.

During the cold spell of June the prospects for a good business were not very bright, but as soon as warmer weather was felt master plumbers say that tenders were immediately asked for, and since that time there has been considerable figuring going on in connection with erections both in and out of Toronto.

Not only have the contracts been more plentiful, but there are more wants to be satisfied in the repairing and jobbing line. This branch of the business, the dealers say, is more profitable than contracts. Competition is so keen, and the number of tenders is so large now, that from a plumber's point of view money is lost by taking a contract in the face of competition. On the repairing jobs, however, even if they are only small, money may be made, and the receipt of permission to do this kind of work gives a plumber more satisfaction than the acceptance of a tender.

Whether it is jobbing or contracting that employs the master plumber makes no difference to the supply houses. They say that during the last ten days they have had an exceptionally large run on earthenware and everything of that description. This branch of their trade has been their special feature.

PLUMBING AND HEATING CONTRACTS.

Purdy, Mansell & Mashinter have the contract for the alterations in the system of plumbing of the Russell House, Ottawa.

The John Ritchie Heating and Plumbing Co. have received contracts for the plumbing and gas-fitting of a dwelling for Mrs. Gordon, Rusholme road, Toronto; the gas-fitting and plumbing of a residence for Mr. H. N. Williams, Rusholme road, and the alterations in plumbing of Mr. John Scholes' Hotel, Yonge street, Toronto.

PLUMBING NOTES.

Brown & Butler, Halifax, are commencing a plumbing business.

The County Council of Kent have decided on the erection of a house of refuge. Tenders are being asked for.

W. J. Burroughes & Co.'s offer of compromise at 25c. on the dollar was not accepted by their creditors, and they have assigned to E. R. C. Clarkson.

The City Commissioner of Toronto has granted the following building permits: A three-storey addition to Loretto Abbey, Wellington place, to cost \$35,000; Messrs. Curry, Baker & Co., alterations and additions to residence at corner of Jarvis and Shuter streets, to cost \$4,000; Canadian Pacific Railway, erection of a brick engine-house at the foot of Simcoe street, on the Esplanade, to cost \$14,800.

GEN. SHERIDAN'S INTERPRETER.

While visiting the Spokanes, Gen. Philip Sheridan related to the Indians, through an Indian interpreter, the wonders of the railroad, and waited to see what effect the revelation would have upon them.

"What do they say?" he asked the interpreter.

"They say they don't believe it."

Sheridan then described the steamboat, and the interpreter repeated this.

"What do they say to that?" the General again asked, seeing the Indians' faces all impassive.

"They say they don't believe that, either."

Then the General gave an account of the telephone, and told how a man, at the end of the long wire, talked to a man on the other end of it. The interpreter remained silent.

"Well," said the General, "why don't you tell them that story?"

"Because I don't believe it myself," answered the interpreter. — Our Dumb Animals.

Armstrong Pipe Threading

AND CUTTING-OFF MACHINES

(Hand or Power.)

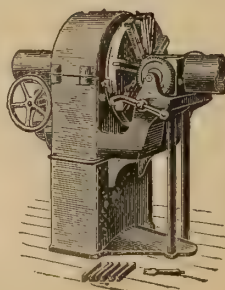
Armstrong Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office: 139 Centre St.

Bridgeport, Conn.



T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.; H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co. Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery. Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

H.O. CANFIELD - BRIDGEPORT, CT.

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

A SENSATIONAL FAILURE.

THE failure of the John Eaton Co., Limited, has developed sensational features which promise to be the subject of more than the usual nine days' talk. The character of the statement is sufficient in itself to create a sensation in business circles, but the arrest of three of the members of the company on a charge of defrauding their creditors is more so.

The fire which destroyed the company's place of business together with the stock took place on May 20th last. A few days after the fire a notice was issued to the effect that the company would rebuild, continue in business and pay one hundred cents on the dollar. The loss by the fire was placed by the company at \$289,233.57, but all but \$63,603 of this was covered by insurance. There was, therefore, some ground for the gratifying statement which the company made in regard to the payment of its liabilities.

Instead, however, of securing one hundred cents on the dollar the creditors may consider themselves lucky if they get 10 cents on the dollar, for it was revealed at the meeting of the creditors a few days ago that to meet the liabilities of \$136,178.37 to unsecured creditors there were only available assets to the amount of \$34,350.29, leaving a deficiency of \$101,828.08. All the insurance policies for \$225,540 and hypothecated goods valued at \$9,986 had been handed over to the Bank of Toronto as security for a claim of \$207,000.

Ranking as creditors to nearly the amount of \$40,000 are the members of the firm and their immediate relatives, but there are other features which do not reflect creditably upon the members of the company.

At a meeting held on June 2 they voted each other, for alleged services, sums aggregating \$8,000, while at another meeting the officers were authorized to pledge all the assets still unpledged. At least some of the money raised on the hypothecated goods appears to have been divided among the members of the company.

The authorized capital of the company

was \$100,000 in 5,000 shares of \$20 each. The shareholders, with the amount subscribed and paid by each, were: R. Baker, Toronto, manager—amount subscribed, \$200; amount still unpaid, \$200. John Eaton, Toronto, manager—amount subscribed, \$600; amount still unpaid, \$540. J. H. McConnell, Toronto—amount subscribed, \$20; amount still unpaid, \$20. G. Noble, law student—amount subscribed, \$20; amount still unpaid, \$18. H. E. Ridley, solicitor—amount subscribed, \$20; amount still unpaid, \$18. Fully paid up: Boyce Thompson, merchant—amount subscribed, \$30,000. T. Thompson, capitalist—amount subscribed, \$10,000. T. C. Thompson, merchant—amount subscribed, \$5,000. W. A. Thompson, merchant—amount subscribed, \$35,000. Harton Walker, agent—amount subscribed, \$1,100; amount still unpaid, \$550. H. K. Bowden, —amount subscribed, \$20; amount still unpaid, \$20.

HOW TO RUIN A TOWN.

A VERY pointed and practical article appears in The Orangeville, Ont., Advertiser, on the possible results of townspeople doing all their buying in the city. We quote it for the merchant to show it to intelligent customers, who are reasonable enough to see that city-buying, if carried out to its extreme limit, can empty a town of both trade and prosperity:

"Let us assume that a town which lacks local pride and spirit and whose inhabitants send much of their cash to departmental stores, carries the thing to its logical conclusion and buys everything away from home, and what follows? The merchants put up their shutters and quit. The main street has gone out of business. The post office and express office are the local branches of the departmental store and are busy sending off orders and handling parcels. The merchants with their families, and their clerks, scatter to the four corners of the earth. There are, perhaps, two banks in the town and one closes at once,

but the other waits to see how business will be. The editor of the local paper looks over his field and peers into the future, and then removes his plant to some place far from an overshadowing city. Those who owned property along the main street find it almost valueless. One of the local lawyers moves away. One of the doctors sells out to the other. The farmers of the surrounding country rise at 3 a.m. and drive on through the village to the city to sell their produce and make their purchases. They consult a city doctor, or lawyer, or dentist, if they need advice or treatment. Their farms, once worth \$100 an acre because adjacent to a living town, decline in value until they are worth only \$30 or \$40 an acre, because no living town and market are near. The owner of the big mill or factory, which was bonused years ago, will now hearken to the offers he gets to locate in other places, and the town having now no future, no prospect of better shipping facilities, the factory will pack up and go away. In short, the town will have no excuse for existing. The surrounding country does not need it; it doesn't need itself; its people might as well move away and get into the city to which they really belong. Logically, this is the outcome—a whole province with no industry or trade in it but places for tinkering and repairing in a small way; a whole province in which only rich cities and rich men can thrive at all, all retailing passing into the hands of millionaire men and companies strong enough to practise any trick or to resort to any tyranny, and none being strong enough to resist them."

An article on these lines should appear in every local paper in Canada this summer. Merchants cannot afford to drift in this matter. They must act promptly, appealing to the common sense of property owners in a town not to set the example of buying outside. If the owners of property will not themselves buy in the place which returns them interest on their investment, of course the case is pretty hopeless. But try what can be done by some vigorous protests, and your local editors are the men to help you.

THE DINGLEY TARIFF AND CANADA.

THE Dingley tariff now lives and moves, President McKinley, by the stroke of his pen, having on Saturday last given it its being. The object of the Act, as set forth in the preamble, is to provide revenue for the Government and to encourage the industries of the United States.

If a high tariff will secure the desideratum there does not seem to be much question as to the result. According to the Senate Committee's estimate, the revenue, under the new tariff, will be \$176,884,000 for the current fiscal year. Next year, with improved trade, the amount is expected by some authorities to be \$220,000,000, leaving a surplus of \$26,000,000.

Nothing is said in the preamble of the bill in regard to the commercial war which it inaugurates against other nations. One has to turn to the speeches of Congressmen for that. A blow has been aimed at Canada, at any rate; the increased duties which have been put on certain articles proves it, no matter what United States politicians may assert to the contrary. Canada, for instance, is the country of the white pine, and this article has been removed from the free list and made dutiable at \$2 per thousand feet. Then there is coal, lead ore, hay, potatoes, horses, eggs, wood pulp and a good many other articles, on all of which the duty has been increased, in some instances enormously. Here are a few of the articles in the new tariff in which Canada is most interested :

	New Tariff	Old Tariff
Lead contained in silver ores	1½c. per lb.	¾c. per lb.
Boards of hemlock, white pine, etc.	\$2 per M. feet	Free
Horses	\$30 per head	20 per cent.
Eggs	5c. per dozen	3c. per dozen
Hay	\$4 per ton	\$2 per ton
Potatoes	25c. per bushel	15c. per bushel
Wool, class 1	11c. per lb	Free
" " 2	12c. "	Free
" " 3, valued at not more than 12c.	4c. per lb.	Free
Wool, class 3, valued at more than 12c.	7c. per lb.	Free
Wood pulp, mechanically ground	1-12c. per lb.	10 per cent.
Coal, bituminous	67c. per ton	40c. per ton
Hides of cattle	15 per cent.	Free

Logs and round unmanufactured timber, including unground pulp-wood, are free. Upon Canada our neighbors are practically dependent for pine logs and pulp-wood; but instead of acting graciously on account thereof, they impose a high tariff upon these when advanced a stage from their raw condition. It is possible an export duty on logs and pulp-wood may put an end to their ungraciousness, or at least bring them to their senses.

Canada has every desire for closer trade relations with the United States. Upon half a dozen distinct occasions we have sent representatives to Washington as an evidence of good faith on our part; but with what result we are all acquainted. We believe that this desire is reciprocated by the great

majority of the business and better classes across the border, but unfortunately there is in United States politics a predominating influence which prefers to follow a policy quite to the contrary.

We are not without hopes of a better day dawning. The business men of the United States, as well as of Canada, are gradually awakening to the fact that they are being made the lick-spittles of party politicians.

By-and-bye when a sufficient number of them awake, business principles, and not party exigencies, will prevail in both the Congress of the United States and in the Parliament of the Dominion.

In the meantime Canadians can gain nothing by turning their face towards the United States. On the contrary they must lose by so doing. The business for us to be about is that of pushing trade with the British Empire.

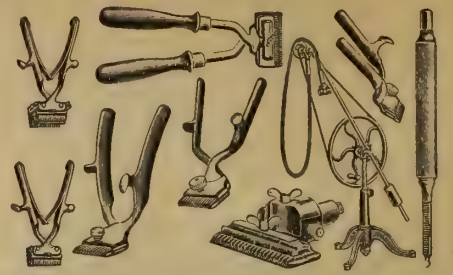
At any rate our trade with the United States has been gradually getting more of a one sided affair: That country's exports to Canada have for years been increasing, while ours to it have been practically stationary. In 1891 our exports to the United States were \$41,138,695, and our imports from that country \$53,685,657. In 1896 the figures were \$44,448,410 and \$58,574,024. Away back in 1882 we sold more to the United States than we do now, while the latter country has increased her sales to Canada by about ten million dollars since that year.

Of our total exports in 1896 nearly 60 per cent. was to the British Empire and less than 30 per cent. to the United States. Of our exports to the British Empire over 54 per cent. was to the Motherland alone. It is not strange in view of these facts that Canadians are not as much concerned about the going into operation of the Dingley tariff as they were seven years ago the McKinley tariff.

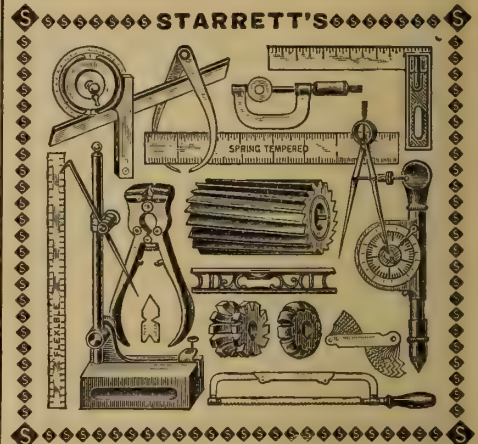
A NEW CLOTHES WRINGER.

There is being introduced by the Dowsell Manufacturing Co., Limited, of Hamilton, something new in clothes wringers. It is known as the "New Leader," and has some special features that are not only new but are claimed to accomplish results not attainable by any other wringer in the market. The advantages claimed for this machine over others is that it is driven by an internal gear, which reduces the amount of power required by about 50 per cent. It has also a new clamping attachment that is said to be very much quicker than anything of the kind in use, and can be readily adjusted to square or round tubs.

The clamping attachments are made of malleable iron and are therefore strong and durable. The rolls are made of an extra heavy quality of rubber. The machine generally is gotten up in first-class style throughout and is guaranteed by the manufacturers.



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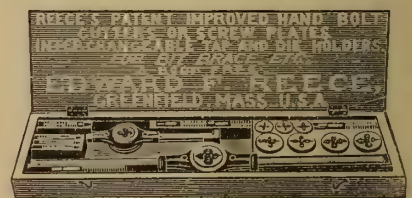
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Canadian Patent, April 3, 1897.

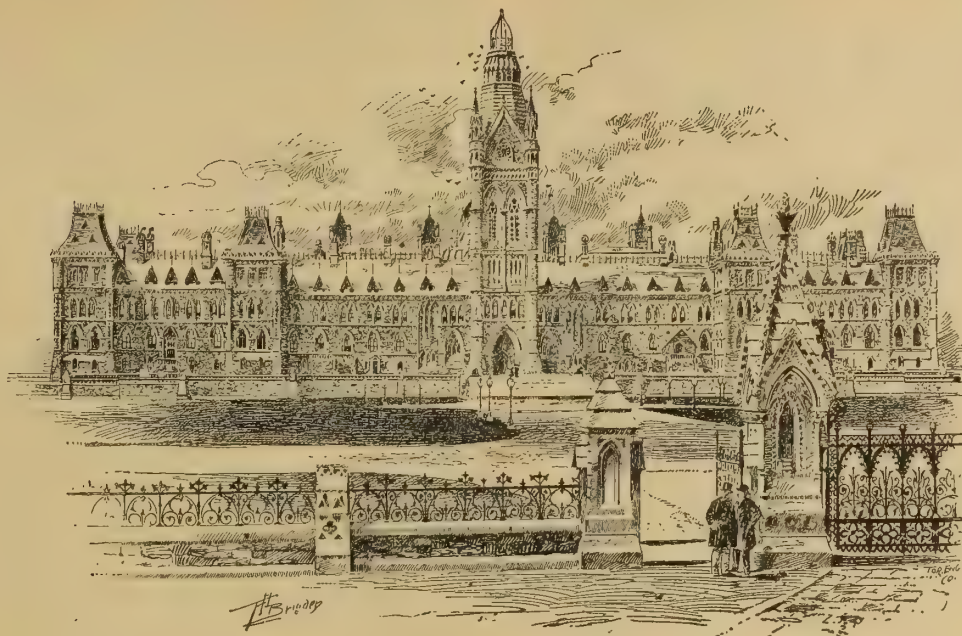
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Canadian Customs Tariff

Alphabetically arranged and revised and corrected from the official copy as assented to by the Governor General, June 29, 1897. A copy of the old Tariff is also given by way of comparison.

PRINTED AND PUBLISHED BY
THE MACLEAN PUBLISHING CO. LIMITED
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TORONTO - AND - MONTREAL

	Old.	New.		Old.	New.
Absinthe	\$2.25 per imp. gal.	\$2.40 Im. gal.	Articles for the use of Governor-General ..	Free	Same
Acetate of lime	20 p c	.....	Articles imported by and for the use of the Dominion Government or any of the Departments thereof, or by or for the Senate or House of Commons	Free	Same
Acetate and nitrate of lead, not ground....	Free	Same	Articles for personal use or Consuls-General, who are natives or citizens of the country they represent, and who are not engaged in any other business or profession	Free	Same
Acid, acetic and pyroligneous, n. e. s., and vinegar, of any strength, not exceeding a strength of proof, and for each degree of strength in excess of the strength of proof an additional duty of	2c. and 15c. per gal.	Same	Articles ex-warehoused for ship's stores	Free	Same
Acid, acetic and pyroligneous of any strength, when imported by dyers, calico printers or manufacturers of acetates or colors, for exclusive use in dyeing or printing, or for the manufacture of such acetates or colors, in their own factories	25 p c	Same	Asbestos in any form other than crude, and all manufactures thereof	25 p c	Same
Acid, muriatic and nitric, and all mixed acids	20 p c	Same	Ashes, pot and pearl, in packages of not less than 25 lbs. weight	Free	Same
Acid, oxalic and boracic	Free	Same	Asparagus	25 p c	Same
Acid, phosphate	2c. per lb.	25 p c	Asphalt or asphaltum, and bone pitch, crude only	Free	Same
Acid, sulphuric	4-roc. per lb.	25 p c	Awnings and tents	25 p c	Same
Acids used for medical, chemical or manufacturing purposes, not specially provided for in this Act	Free	Same	Axle grease	25 p c	Same
Aconite root	Free	Same	Babbit metal.	10 p c	Same
Acorns as nuts	2c. per lb.	Same	Bacon and hams, shoulders and sides	2c. per lb.	Same
Advertising bills, stickers and folders	15c lb. & 25 p c	15c. per lb.	Bagatelle tables or boards, with cues and balls	35 p c	Same
Advertising pamphlets, pictures and pictorial show cards, illus. advertising periodicals, illus. price lists, advertising calendars, advertising almanacs, tailors' and mantlemakers' fashion plates	6c. per lb. and 20 p c	15c. per lb.	Baggage, travelers'	Free	Same
Agaric	Free	Same	Bags, cotton, seamless	20 p c	Same
Alabaster, spar, terra cotta or composition ornaments	35 p c	Same	Do. made up by the use of the needle	32½ p c	.....
Ale, beer and porter, in bottles (6 q. or 12p. to Imp. gal.)	24c. Imp. gal.	Same	Bags, carpet bags	30 p c	Same
Ale, beer and porter, in casks, or otherwise than bottles	16c. Imp. gal.	Same	Bags, paper seed bags, illustrated	6c. lb. & 20 p c	35 p c
Albumenized and other papers chemically prepared for photographers' use	30 p c	Same	Bags, paper	25 p c	Same
Albums, insides of paper	Free	Same	Bags, jute or hemp	20 p c	Same
Albums or books of views, without reading matter	6c. per lb. and 20 p c	35 p c	Baking powders	6c. per lb.	Same
Ale, ginger	20 p c	Same	Bamboos, manufactured	Free	Same
Alkanet root, crude, crushed or ground	Free	free	Bamboo reeds, not further manufactured than cut into suitable lengths for walking sticks or canes, or sticks for umbrellas, parasols or sunshades	Free	Same
Almonds, shelled	5c. per lb.	Same	Barilla	Free	Same
Do. not shelled	3c. per lb.	Same	Bark, oak and tanners'	Free	Same
Almond paste as confectionery	35 p c	Same	Barley	30 p c	Same
Aloes, unground	Free	Same	Barometers	25 p c	Same
Alum, in bulk only, ground or unground	Free	Same	Barrels, Can. manuf., exp. filled and ret'd empty under such reg'ns as the Min. of Cus. shall direct	Free	Same
Alum, burned or calcined	20 p c	Same	Barrels cont. petroleum or its products, or any mixt. of which petroleum is a part, when such contents are chargeable with a specific duty	20c. each	Same
Aluminum, or aluminum and alumina and chloride of aluminum or chloralum, sulphate of alumina and alum cake	Free	Same	Beads and bead ornaments	35 p c	30 p c
Chloralum	Free	Same	Beans	15c. per bush.	Same
Ambergris	Free	Same	Bean, tonquin, vanilla and nux vomica, crude only	Free	Same
Ammonia, sulphate of	Free	Same	Bed comforters, or quilts of cotton, white	25 p c	35 p c
Anatomical preparations and skeletons or parts thereof	Free	Same	Do. colored	30 p c	35 p c
Anchors	Free	Same	Reef, salted in barrels, the barrel containing the same to be free of duty	2c. per lb.	Same
Animals, living, n.e.s.	20 p c	Same	Bees	Free	Same
Animals, for improvement of stock	Free	Same	Belladonna leaves	Free	Same
Animals, live hogs	1½ c. per lb.	Same	Bells, when imported by and for the use of churches	Free	Same
Animals, brought into Canada temporarily and for a period not exceeding 3 months, for the purpose of exhibition	Free	Same	Belts, leather	30 p c	35 p c
Aniline dyes and coal tar dyes, in bulk or packages of not less than one pound weight, including alizarine and artificial alizarine	Free	Same	Belts, silk	30 p c	35 p c
Aniline oil, crude	Free	Same	Belts, cotton	30 p c	35 p c
Aniline salts, and arseniate of	Free	Same	Belting of leather or other material, n.e.s.	20 p c	Same
Annato, liquid or solid, and seed	Free	Same	Benzole, n.e.s.	6c. Imp. gal.	Same
Antimony, not ground, pulverized or otherwise manufactured	Free	Same	Berries for dyeing, or used for composing dyes	Free	Same
Antiquities, collections of	Free	Same	Bicycles, tricycles or velocipedes	30 p c	Same
Anvils	27½ p c	30 p c	Billiard tables, with or without pockets, and bagatelle tables or boards, cues, balls and cue racks	35 p c	Same
Apricots, green	20 p c	Same	Billiard balls, papier mache, when imported separately	35 p c	Same
Apparatus and philosophical instruments, imported by and for use of colleges, schools, scientific and literary societies, such as are not manufactured in Canada	Free	Same	Billiard balls, bone or ivory, when imported separately	35 p c	Same
Apparatus for colleges and schools, which are manufactured in Canada, to be rated according to material	Free	Same	Billiard balls, celluloid, when imported separately	35 p c	Same
Apparel, wearing and other personal and household effects (not merchandise) of British subjects dying abroad, but domiciled in Canada	Free	Same	Birds, skins for taxidermic purposes	Free	Same
Apples, including the barrel	40c. per bbl.	Same	Bird cages	35 p c	Same
Apples, dried	25 p c	Same	Biscuits of all kinds, not sweetened	25 p c	Same
Apple trees of all kinds	3c. each	Same	Biscuits, sweetened	27½ p c	Same
Argols, not refined	Free	Same	Bismuth, metallic, in its natural state	Free	Same
Artist color boxes, japanned	25 p c	Same	Bitters (n.e.s.)	\$2.25 Im. gal.	\$2.40 Im. gal.
Arms, including muskets, rifles and other firearms, n.e.s.	20 p c	30 p c	Blackening, shoe and shoemakers' ink, shoe, harness and leather dressing, and harness-soap	25 p c	Same
Army and navy and Canadian military arms, clothing, musical instruments for bands, military stores and munition of war	Free	Same	Black lead, plumbago manufacture	25 p c	Same
Arrowroot	20 p c	Same	Black book muslin	30 p c	35 p c
Artificial flowers	25 p c	Same	Blackberries, gooseberries, raspberries, strawberries, cherries and currants, n.e.s. the weight of the package to be included in the weight for duty	2c. per lb.	Same
Arsenic	Free	Same	Bladders	20 p c	Same
Arseniate of aniline	Free	Same	Blanketing and lapping, and discs or mills for engraving copper rollers imported by cotton manufacturers, calico printers and wall paper manufacturers, for use in their own factories only	Free	Same

	Old.	New.		Old.	New.
Bolting cloth, not made up	Free	Same	Brick, fire brick, not to include stove linings	Free	20 p c
Bone dust and ash for manufacture of phosphate and fertilizers	Free	Same	Brimstone, crude or in roll or flour	Free	Same
Bone dust, unmanufactured	Free	Same	Brim moulds, for gold beaters	Free	Same
Bone black	Free	Same	British gum, dextrine, sizing, cream and enamelled sizing	10 p c	Same
Bones, crude, not manufactured, burnt, calcined, ground or steamed	Free	Same	Bristles	Free	Same
Bones, burnt, calcined	20 p c	free	Britannia metal in pigs and bars	Free	Same
Bone, manufactures of, fancy	35 p c	Same	manufactures of, if not plated	25 p c	Same
Bone, manufactures of, n.e.s.	20 p c	Same	manufactures of, if plated	30 p c	Same
Bone pitch, crude only	20 p c	Same	Bromine	Free	Same
Bone, cuttlefish	Free	Same	Brooms	20 p c	Same
Bonnets, n.e.s.	30 p c	Same	Brushes	25 p c	Same
Booklets, printed on paper, etc.	6c. per lb.	20 p c	Broom corn	Free	Same
Book covers, illustrated paper	6c. lb. & 20 p c	20 p c	Bronze or Dutch metal	30 p c	Same
Books, n.e.s., printed in two languages, one of which is English or French	6c. per lb.	20 p c	Buckskins, tanned or dressed (glove leather)	10 p c	Same
Books, printed in any of the languages or dialects of any of the Indian tribes of the Dominion	Free	Same	Bronze statuettes	35 p c	Same
Books, printed periodicals and pamphlets, n.e.s., not being foreign reprints of British copyright works, nor blank account books, nor books to be written or drawn upon, nor Bibles, prayer books, psalm and hymn books	6c. per lb.	20 p c	Buckwheat	10c. per bushel	Same
Books, Bibles, prayer books, psalm books and hymn books	Free	Same	meal or flour	¼ c. per lb.	Same
Books, imported for the use of schools for the deaf and dumb, and blind, and embossed for the blind	Free	Same	Buchu leaves	Free	Same
Books, not being printed or reprinted in Canada, which are included and used as text books in the curriculum of any university or incorporated college in Canada for the use of students thereof	Free	Same	Buckles, tin, for suspenders	35 p c	Same
Books, British copyright works, reprint of ..	6c lb. & 12½ pc	10 or 20 p c	Buckram, for the manufacture of hat and bonnet shapes	Free	Same
Books, printed by any Government or by any scientific association and supplied gratuitously, not for trade	Free	Same	Builders' hardware	32½ p c	Same
Books, specially imported for use of public free libraries, not more than two copies of one book; and books which shall have been manufactured more than twelve years, bound or unbound	Free	Same	Bulbs, flower	Free	Same
Books, blank books, account books, copy books, or books to be drawn or written upon	35 p c	Same	Bullion, gold and silver, in bars, blocks or ingots and bullion fringe	Free	Same
Bookbinders' cloth	Free	Same	Burr stones, in blocks, rough unmanufactured, not bound up or prepared for binding into mill stones	Free	Same
Bookbinders' tools and implements, including ruling machines	10 p c	Same	Burgundy pitch	Free	Same
Boots and shoes, leather or rubber	25 p c	Same	Butchers' steels	35 p c	30 p c
Boots and shoes, rubber, with tops or uppers of cloth, etc.	30 p c	25 p c	Butter	4c. per pound	Same
Boot and shoe counters, made from leather board	20 p c	25 p c	Butter triers	35 p c	Same
Boot and shoe dressing	25 p c	Same	Butterine, or other substitute for butter, importation prohibited		
Boot, shoe and stay laces, of any material ..	30 p c	Same	Buttons of vegetable ivory, pearl or horn ..	8c. per gross, and 20	35 p c
Botanical specimens	Free	Same	position	4c. per gross, and 20 p c	35 p c
Borax, ground or unground, in bulk of not less than twenty-five lbs. only	Free	Same	Buttons, pantaloons, and all other, n.e.s.	20 p c	Same
Boxwood rules	25 p c	Same	Buttons, shoe, papier mache	Free	Same
Boxes, paper boxes labelled, empty	15c lb. & 25 p c	Same	Cabinet of Coins, collection of medals and other antiquities, including collection of postage stamps	Free	Same
Boxes, paper boxes, empty, plain	35 p c	Same	Cabinet ware or furniture (wood or iron) ..	30 p c	Same
Boxes, cash	25 p c	Same	Calcareous tufa	Free	Same
Boxes and writing desks, fancy and ornamental	35 p c	Same	Calumba root	Free	Same
Braces or suspenders, and parts thereof	35 p c	Same	Camwood and Sumac, and extract of, for dyeing or tanning	Free	Same
Braids of all kinds	30 p c	35 p c	Candied peel, lemon, orange and citron ..	¼ c. lb. and 35	35 p c
Bran, mill feed	20 p c	Same	Candles, tallow	25 p c	Same
Brass, drawn, plain and fancy tubing not bent or otherwise manufactured in lengths not less than six feet	Free	Same	Candles, paraffine wax	4c. per lb.	30 p c
Brass, old, scrap, and in sheets or plates ..	Free	Same	Candles and tapers, oil others, including sperm	25 p c	Same
Brass bars and bolts, drawn, plain and fancy tubing	Free	Same	Candle wick and lamp wicks	25 p c	Same
Brass cups, being rough blanks, for the manufacture of brass and paper shells and cartidges for use in their own factories	Free	Same	Cane or rattan, split or otherwise manufactured	17½	15 p c
Brass wire	10 p c	20 p c	Canton flannel, white	25 p c	Same
Brass, ribs of iron or steel, runners, rings, caps, notches, ferrules, mounts and sticks or canes in the rough, or not further manufactured than cut into lengths suitable for umbrellas, etc., imported by manufacturers of umbrellas, parasols and sunshades for use in their factories in the manufacture of umbrellas, etc., only	Free	Same	Canton flannel, printed or dyed	30 p c	35 p c
Brass pumps	30 p c	Same	Canvas for manuf. of floor oil cloth, not less than 45 in. wide, and not pressed nor calendered	Free	Same
Brass, twisted brass and copper wire, when imported by manufacturers of boots and shoes for use in their factories	Free	Same	Canvas, "jute," when imported by manufacturers of floor oil cloth, for use in their factories	Free	Same
Brass, in strips, for printers' rules, not finished	Free	Same	Canvas of flax or hemp and sail twine, to be used for boat and ship sails	5 p c	Same
Brass and copper nails, rivets and burrs	30 p c	Same	Caoutchouc, unmanufactured	Free	Same
Brass tubing, cased	30 p c	Same	Caplins, unfinished leghorn hats	Free	Same
Brass, manufactures of, n.e.s.	30 p c	Same	Caps, hats and bonnets, n.e.s.	30 p c	Same
Breadstuffs, grain and flour, and meal of all kinds, when damaged by water in transitu, upon the appraised value	20 p c	Same	Caps, percussion, for guns, rifles and pistols ..	30 p c	Same
Brick, hollow and porous	20 p c	Same	Caps, percussion copper for blasting	3 p c	Same
Brick, building	20 p c	Same	Capsules for bottles, to be rated according to material		
Brick, bath brick	20 p c	Same	Carbons	\$2.50 per 1,000	35 p c
			Cardboard	35 p c	Same
			Cards, show cards,	6c. lb. and 20	35 p c
			Cards, for playing,	6cts. per pack	Same
			Carpet bags, trunks, and valises	30 p c	Same
			Carpet, treble ingrain, three-ply and two-ply carpets, composed wholly of wool	5c. per square yd and 25 p c	35 p c
			Carpets, two-ply and three-ply ingrain carpets, of which the warp is composed wholly of cotton or other material than wool, worsted, the hair of the Alpaca goat, or other like animal	3c. per square yd. and 25 p c	35 p c
			Carpets, Brussels, tapestry, Dutch, venetian and damask; carpet mats and rugs of all kinds, n.e.s.; and printed felts and druggets and other carpets and squares n.o.p.	30 p c	35 p c
			Carpets, Smyrna mats and rugs	30 p c	35 p c
			Carpeting, matting and mats of hemp, cocoa, jute and stair pads	25 p c	Same
			Cartridges, for guns, rifles and pistols, and cartridge cases	30 p c	Same
			Carriages, buggies and pleasure carts, and similar vehicles, n.e.s., costing not more than \$50	\$5 ea. & 25 p c	35 p c
			Costing more than \$50	35 p c	Same

	Old.	New.		Old.	New.
Farm and freight wagons, carts, drays and similar vehicles.....	25 p c	Same	Cobalt, ore of.....	Free	Same
Carriages, children's carriages of all kinds....	35 p c	Same	Cochineal.....	Free	Same
Carriages, parts of, or other manufactured articles, shall be charged with same rate of duty, on a proportionate valuation, as that chargeable upon the finished article.			Cocoa mats and matting.....	25 p c	Same
Carriage hardware.....	32½ p c	30 p c	Cocoanuts, imported from place of growth by vessel direct to a Canadian port.....	50c. per 100	Same
Carriages of travellers, and carriages laden with merchandise, and not to include circus troupes or hawkers.....	Free	Same	Cocoanuts, not imported direct.....	\$1 per 100	Same
Cart or wagon skeins or boxes.....		30 p c	Cocoa paste and chocolate paste, cocoas and cocoa butter.....	4c. per lb.	Same
Cash boxes.....	25 p c	30 p c	Cocoa shells and nibs, chocolate and other preparations of cocoa.....	20 p c	Same
Cast, as models for the use of schools of design.....	Free	Same	Cocanut, desiccated, sweetened or not.....	5c. per lb.	Same
Catgut strings, or gut cord for musical instruments.....	Free	Same	Cocoa beans, not roasted, crushed or ground.....	Free	Same
Catgut or whipgut, unmanufactured.....	Free	Same	Coffee, green, n.e.s.....	10 p c	Same
Caustic soda.....	Free	Same	Coffee, green, imported direct from the country of growth and production, or purchased in bond in any country where coffee is subject to Customs duty.....	Free	Same
Cases, for jewels, watches, silver and plated ware, cutlery, and other like articles of any material.....	5 cents each and 30 p c	35 p c	Coffee, roasted or ground, when not imported direct from the country of growth and production.....	2c. per lb. and 10 p c	Same
Celluloid, xylonite, or xyolite, in sheets, lumps, balls, or blocks, in rough.....	Free	Same	Coffee, roasted or ground, and all imitations of and substitutes for, n.e.s.....	2c. per lb.	Same
Celluloid moulded into sizes for handles of knives and forks, not bored nor otherwise manf.....	10 p c	Same	Coffee, extract of, or substitutes for, of all kinds.....	3c. per lb.	Same
Celluloid balls and cylinders, coated with tin-foil, or not, but not finished or further manufactured.....	10 p c	Same	Coffee and milk.....	30 p c	Same
Celluloid collars.....	24c doz. & 25 p c	35 p c	Coffee mills or roasters.....	27½ p c	25 p c
Do. cuffs.....	4c pair & 25 p c	35 p c	Coffins and caskets, of any materials.....	25 p c	Same
Cement, hydraulic or water lime, ground, Portland or Roman, including barrels.....	40c. per barrel	12½c. 100 lbs.	Coins, silver coins from the U. S.....	25 p c	Same
Chalk stone, china or Cornwall stone, feldspar and cliff stone, ground or unground.....	Free	Same	Coins, gold and silver, except U. S. silver coins.....	Free	Same
Chalk, manufactured.....	20 p c	Same	Coin and coin yarn.....	Free	Same
Chamomile flowers.....	Free	Same	Collars of linen, cotton, celluloid, xylonite, or xyolite.....	25c. per doz. and 25 p c	35 p c
Chamomile flowers, powdered.....	20 p c	Same	Collars, lace collars.....	30 p c	35 p c
Chamois skins.....	17½ p c	Same	Collodion.....	20c. per Im. gal. and 20 p c	
Charts, admiralty.....	Free	Same	Cologne water, alcoholic perfumes, and per- fumed spirits, bay rum, and lavender waters, hair, tooth and skin washes and other toilet preparations containing spirits of any kind, when in bottles or flasks weighing not more than 4 oz. each.....	50 p c \$2.25 per gal. and 40 p c	Same \$2.40 per gal. and 40 p c
Do. other.....	20 p c	Same	Combs, dress and toilet, all kinds.....	35 p c	Same
Charcoal.....	20 p c	Same	Combs, curry combs, as saddlers' hardware.....	32½ p c	30 p c
Cheese.....	3c. per lb.	Same	Commercial blank forms.....	35 p c	Same
Cheese cloths, white.....	25 p c	Same	Communion plate imported by and for use in churches.....	Free	Same
Do. colored.....	30 p c	35 p c	Composition metal for the manufacture of filled gold watch-cases.....	10 p c	Same
Cheques, pro. notes and drafts, printed.....	35 p c	Same	Compasses for ships.....	Free	Same
Cherry trees.....	3c. each	Same	Composition nails, spikes and sheathing nails.....	15 p c	Same
Chewing gum, if sweetened.....	½c lb. & 35 p c	Same	Composition fuel, in blocks.....	20 p c	Same
Do. not sweetened.....	20 p c	Same	Concentrated lye.....	20 p c	Same
Chicory, raw or green.....	3c. per lb.	Same	Condensed coffee.....	30 p c	Same
Do. dried, roasted or ground.....	4c. per lb.	Same	Condensed milk.....	3¼c. per lb.	Same
China clay, natural or ground.....	Free	Same	Confectionery and sugar candy.....	½c lb. & 35 p c	Same
Chloralum or chloride of alum.....	Free	Same	Copper, old and scrap in pigs, bars, rods, bolts, over six feet in length, ingots and sheathing not planished or coated, and copper seam- less drawn tubing.....	Free	Same
China and porcelain ware.....	30 p c	Same	Copper wire.....	15 p c	Same
Chloride of barium.....	20 p c	Same	Do. twisted, for manufacture of boots and shoes.....	Free	Same
Chloride of lime.....	Free	Same	Copper rollers, for use in calico printing, when imported by calico printers for use in their factory in the printing of calico and for no other purpose, such rollers not being manu- factured in Canada.....	Free	Same
Chronometer clocks, as clocks.....	25 p c	Same	Copper, in sheets.....	Free	Same
Do. watches.....	25 p c	Same	Do. bath, finished.....	30 p c	Same
Chronometers and compasses for ships.....	Free	Same	Do. all manufactures of, n.e.s.....	30 p c	Same
Chromos, chromotypes, oleographs and other cards, pictures or artistic works of similar kinds, produced by any process other than hand painting or drawing whether for busi- ness or advertising purposes or not, printed or stamped on paper, cardboard or other materials, n.e.s.....	6c. per lb. and 20 p c	20 p c	Do. precipitate of, crude.....	Free	Same
Church vestments.....	20 p c	Same	Copperas, sulphate of iron.....	Free	Same
Churns, brooms, pails, tubs, pounders and rolling pins.....	20 p c	Same	Copy books.....	35 p c	
Cider, not clarified or refined.....	5c. 1m. gal.	Same	Copying presses.....	30 p c	
Do. clarified or refined.....	10c. 1m. gal.	Same	Cords and tassels of silk or any other material.....	30 p c	
Cigars and cigarettes.....	\$2 lb. & 25 p c	\$3 lb. and 25 p c	Cordage, cotton, of all kinds.....	25 p c	
Cinchona bark.....	Free	Same	Corduroy, white, 25 per cent. colored.....	30 p c	35 p c
Do. powdered.....	20 p c	Same	Corn, Indian.....	7½c. per bush.	Free
Cinnabar.....	Free	Same	Do. when for feed.....	7½c. per bush.	Free
Citrons, rinds of, in brine.....	Free	Same	Cornmeal.....	40c. per bbl.	25c. per bbl.
Citric acid.....	Free	Same	Corks and manufactures of cork-wood or cork- bark.....	20 p c	Same
Clays.....	Free	Same	Cork-wood or bark, unmanufactured.....	Free	Same
Cliff stone, unmanufactured.....	Free	Same	Corkscrews and cork drawers.....	27½ p c	30 p c
Do. manufactured.....	30 p c	Same	Cornice poles.....	30 p c	Same
Clocks and clock cases of all kinds.....	25 p c	Same	Corsets.....	32½ p c	35 p c
Clock springs and clock movements other than for tower clocks, complete or in parts.....	25 p c	Same	Do. clasps, spoon clasps or busks, blanks, side steels and other corset steels, whether plain, japanned, lacquered, tinned or covered with paper or cloth; also back, bone or cor- set wires, covered with paper or cloth, cut to lengths and tipped with brass or tin, or untipped, or in coils.....	5c. lb. & 20 p c	35 p c
Clothes wringers.....	25c. each and 20 p c	35 p c	Cottolene, sub. for lard.....	2c. per lb.	Same
Clothing, cotton, silk and linen.....	32½ p c	35 p c	Cotton, raw.....	Free	Same
Do. ready-made, and wearing apparel of every description, composed wholly or in part of wool, worsted, the hair of the alpaca goat or other like animal, n.o.p.....	5c. per lb. and 30 p c	35 p c	Do. covered wire.....	30 p c	25 p c
Clothing, donations of for charitable purposes.....	Free	Same	Do. seed in bulk.....	10 p c	Same
Clothing, imported by and for use of army and navy, or for Canadian militia. Dutiable ac- cording to material. Duty refunded upon reference to Department.	Free	Same	Do. bed quilts, white.....	25 p c	35 p c
Coal, and coal dust, anthracite.....	Free	Same	Do. quilts with woven colored border....	30 p c	35 p c
Coal, bituminous, per ton of 2,000 lbs.....	60c. per ton	53c. per ton			
Coal dust and slack, bituminous.....	20 p c	Same			
Coke.....	Free	Same			
Coal tar and coal pitch.....	Free	Same			

	Old.	New.		Old.	New.
Cotton belting.....	20 p c	Same	Dried roots, n.e.s.....	Free	Same
Do. and jute tapestry.....	30 p c	25 p c	Dried vegetables.....	25 p c	Same
Do. and linen damasks.....	25 p c	30 p c	Druggets, dyed cotton.....	30 p c	35 p c
Do. grey or unbleached, fabrics.....	22½ p c	25 p c	Drugs, in a crude state, used in dyeing or tanning.....	Free	Same
Do. fabrics, white or bleached, n.e.s.....	25 p c	Same	Dryer's japan.....	20c gal & 20 p c	Same
Do. fabrics, printed, dyed, or colored....	30 p c	35 p c	Dualin, dynamite, giant powder and nitro....	4c. per lb.	3c. per lb.
Do. linen and silk clothing, corsets and other articles made from cotton fabrics.....	32½ p c	35 p c	Duck, for belting and hose, when imported by manufacturers of rubber goods for use in their factories.....	Free	Same
Do. handkerchiefs, printed or plain.....	30 p c	35 p c	Dutch metal or bronze.....	25 p c	Same
Do. or linen shirts, costing more than \$3 per dozen.....	25 p. c. & sp. d. of \$1 doz.	35 p c	Dye wood, ground logwood and fustic.....	Free	Same
Do. shirts, n.e.s.....	35 p c	Same	Dyes, patent prepared.....	Free	Same
Do. undershirts and drawers knitted.....	35 p c	Same	Dyes, aniline and coal tar dyes, in bulk or packages of not less than 1 lb. weight, including alizarine and artificial alizarine.....	Free	Same
Do. covered flat steel, cut to lengths, with brass on ends.....	5c. lb. & 20 p c	35 p c	Dyes, aniline, n.e.s., less than 1 lb.....	20 p c	Same
Do. warps and cotton yarns, dyed or undyed, n.e.s.....	25 p c	Same	Dye, jet black.....	Free	Same
Do. yarns, number forty and finer.....	Free	Same	Dyeing or tanning articles in a crude state, used in dyeing or tanning, n.e.s.....	Free	Same
Do. lamp wicks.....	25 p c	Same	Earth closets.....	30 p c	Same
Do. or linen collars.....	24c. per doz. and 25 p c	35 p c	Earthenware tiles.....	35 p c	Same
Do. parasols and umbrellas.....	35 p c	Same	Earthenware drain tiles, not glazed.....	20 p c	Same
Do. prunella.....	Free	Same	Earthenware and stoneware demijohns or jugs, churns and crocks, per gal. holding capacity.....	3c. per gal.	30 p c
Do. pillow cases.....	32½ p c	35 p c	Earthenware and stoneware, brown or col'd, and Rockingham ware, white granite or iron stoneware and C.C. ware, decorated, printed or sponged, and all earthenware n.e.s.....	30 p c	Same
Do. seamless bags.....	20 p c	Same	Eggs.....	3c. per doz.	Same
Do. sewing thread, in hanks, black, bleached, or unbleached, three and six cord.....	12½ p c	15 p c	Elastic rubber thread.....	Free	Same
Do. sewing thread, and crochet cotton on spools or in balls.....	25 p c	Same	Electric and galvanic batteries.....	25 p c	Same
Do. thread, all other, n.e.s.....	25 p c	Same	Electric light apparatus, parts of, when imported separately.....	25 p c	Same
Do. twine.....	25 p c	Same	Electro-plated ware, wholly or in part electro or gilt.....	30 p c	Same
Do. towels and shawls.....	25 p c	30 p c	Electrotypes, stereotypes and celluloids of books, and bases and copper shells for the same, whether composed wholly or in part of metal or celluloid.....	Free	Same
Do. velveteens, cotton velvets and cotton plush.....	30 p c	35 p c	Electrotypes, stereotypes and celluloids.....	2c. per sq. in.	1½c. pr sq. in.
Do. fire hose, lined with rubber.....	32½ p c	35 p c	Electrotypes, stereotypes and celluloids of newspaper columns, and bases for the same, composed wholly or partly of metal or celluloid.....	¾c. per sq. in.	¼c. per sq. in.
Do. wadding, batting, batts dyed or not..	22½ p c	25 p c	Matrices or copper shells of the same.....	2c. per sq. in.	1½c. pr sq. in.
Do. warps and cotton yarns, dyed or undyed, n.e.s.....	25 p c	Same	Embalming boards.....	30 p c	Same
Do. jeans and couilles, for corset and dress stay makers, for use in their factories.....	25 p c	20 p c	Embossed paper, extra heavy, for cracked and damaged walls.....	35 p c	Same
Do. manuf. of, n.e.s. (see cotton fabrics.)	Free	Same	Embroideries, n.e.s.....	30 p c	35 p c
Do. waste and cotton wool.....	Free	Same	Emery in bulk, crushed or ground.....	Free	Same
Do. seed cake.....	Free	Same	Emery and sand paper.....	20 p c	35 p c
Cow hair, unmanufactured.....	Free	Same	Emery wheels.....	25 p c	Same
Do. manufactured, n.e.s.....	20 p c	30 p c	Enamelled iron hollow ware.....	35 p c	30 p c
Cracked corn and wheat.....	20 p c	Same	Engines, locomotives.....	35 p c	Same
Cranberries, plums and quinces.....	25 p c	Same	Engines, fire.....	35 p c	Same
Crapes, black.....	20 p c	Same	Engines, fire, chemical.....	35 p c	Same
Crocus, composition.....	25 p c	Same	Engines, steam, of ships or other vessels built in any foreign country, etc.....	25 p c	Same
Crocks, earthenware, per gal. holding capacity.....	3c.	30 p c	Engines, all others, and boilers, n.e.s.....	27½ p c	25 p c
Crop end of steel rails for the manuf. of steel..	\$4 per ton	\$2 per ton	Engravings and prints.....	20 p c	Same
Crowbars.....	30 p c	Same	Entomology, specimens of.....	Free	Same
Cream of tartar, in crystals.....	Free	Same	Envelopes, paper, of all kinds.....	35 p c	Same
Do. other, n.e.s.....	20 p c	Same	Ergot.....	Free	Same
Crucibles of plumbago.....	Free	Same	Esparto, or Spanish grass, and other grasses and pulp of, including fancy grasses, dried, but not colored or otherwise manufactured.....	Free	Same
Do. earthenware.....	30 p c	Same	Essences or extracts, mixed with spirits.....	\$2.25 per 1m. gal. and 30 p c	\$2.40 and 30 p c
Cucumbers.....	25 p c	Same	Essential oils.....	10 p c	Same
Cuffs, of paper.....	35 p c	.....	Ether, sulphuric.....	5c. per lb.	25 p c
Cuffs of linen, cotton, celluloid, xylonite or xylolite.....	4c. pr. & 25 p c	35 p c	Excelsior, for upholsterers' use.....	25 p c	.....
Cultivators and parts thereof.....	20 p c	Same	Extract of logwood, fustic, oak, and of oak bark.....	Free	Same
Cups or other prizes won in bona fide competitions.....	Free	Same	Extract of malt, for medicinal purposes, n.e.s.....	25 p c	Same
Curry cards and combs.....	32½ p c	30 p c	Extract of fluid beef, not medicated.....	25 p c	Same
Curry powders.....	25 p c	Same	Eyelets of brass.....	Free	Same
Curling stones of granite.....	Free	Same	Eyeglasses, finished.....	30 p c	Same
Curtains, trimmed or untrimmed.....	30 p c	35 p c	Eyeglasses, unfinished, and parts of.....	20 p c	Same
Cutlery—knives wholly or in part plated.....	35 p c	30 p c	Fancy grasses, dried, but not colored nor otherwise manufactured.....	Free	Same
Do. not elsewhere specified.....	25 p c	30 p c	Fancy workboxes, writing desks, glove boxes, handkerchief boxes, manicure cases, perfume cases, toilet cases and fancy cases for smokers' sets, and all similar fancy articles made of bone, shell, horn, ivory, wood, leather, plush, satin, silk, satinette or paper; dolls and toys of all kinds, including sewing machines, when not more than \$2 in value; and toy whips, ornaments of alabaster, spar, amber, terra cotta or composition statuettes and bead ornaments, n.e.s.....	35 p c	Same
Cut flowers.....	20 p c	Same	Fans, to be rated according to material.....	1½c. per lb.	Same
Damask of cotton, or linen.....	25 p c	30 p c	Farina.....	20 p c	Same
Decalcomanie, or transfer pictures.....	6c. lb. & 20 p c	30 p c	Feathers, undressed.....	30 p c	Same
Deer (glove leather) tanned or dressed, colored or not colored.....	10 p c	Same	Feathers, n.e.s.....	30 p c	Same
Deer hair.....	Free	Same	Feather beds, bolsters and pillows.....	30 p c	Same
Degras.....	20 p c	Same	Felt, pressed, of all kinds, not filled or covered by or with any woven fabrics.....	17½ p c	20 p c
Degras and oleo-stearine, when imported by manufacturers of leather for use in the manufacture of leather in their factories....	Free	Same	Felt, adhesive, for sheathing vessels.....	Free	same
Dental instruments of all kinds.....	15 p c	Same	Felt, printed as carpets.....	30 p c	same
Diamonds, set.....	25 p c	Same			
Diamonds, unset, dust or bort, and black diamonds for borers.....	Free	Same			
Diamond drills for prospecting for minerals, not to include motive power.....	Free	Same			
Dice, ivory or bone, fancy.....	35 p c	Same			
Dogs.....	20 p c	Same			
Doors, for safes and vaults, of iron or steel ..	30 p c	Same			
Door knob tops.....	32½ p c	30 p c			
Dragon's blood.....	Free	Same			
Drain pipes, sewer pipes, chimney linings or vents, and inverted blocks, glazed or unglazed, and earthenware tiles.....	35 p c	Same			
Draughts and chessmen of ivory or bone, fancy.....	35 p c	Same			
Drawing paper, mounted.....	30 p c	Same			
Drawings, n.e.s.....	20 p c	Same			
Dried flowers.....	20 p c	Same			

	Old.	New.		Old.	New.
Felt, roofing, tarred or coated.....	25 p c	same	Flour, buckwheat or meal.....	¼ c. per lb.	same
Felt, roofing, not tarred	25 p c	same	Flour of corn	1½ c. per lb.	same
Felt cloth, n.e.s.....	5c. lb. & 25 p c	same	Flour of rye.....	50c. per bbl.	same
Ferro-manganese and ferro-silicon	5 p c	same	Flour of wheat.....	75c. per bbl.	same
Fertilizers, artificial and mineral	10 p c	same	Flour of rice or sago.....	25 p c	60c. per bbl.
Fibre, Mexican, Tampico or Istle.....	Free	same	Fluting machine, iron.....	27½ p c	same
Fibreware, indurated fibreware, vulcanized fibreware and all articles of like material	25 p c	same	Fly paper	35 p c	25 p c
Fibre, vegetable, for manufacturing purposes	Free	same	Fog signals, detonating.....	30 p c	same
Fibrilla.....	Free	same	Folding machines.....	10 p c	same
Filberts	2c. per lb.	same	Folia digitalis	Free	same
Files and rasps	35 p c	30 p c	Food, milk, and all similar prep.....	30 p c	same
Fillets of cotton and rubber not exceeding 7 inches wide, for manufac. of card clothing..	Free	same	Foot grease, refuse of cotton seed, but not when treated with alkalies.....	Free	same
Firearms	20 p c	30 p c	Forks, table cast iron, not handled nor ground, or otherwise further manufactured.....	10 p c	same
Fire bricks, for use exclusively in processes of manufactures, not to include stove linings..	Free	same	Fossils	Free	same
Fire clay gas logs	20 p c	same	Fowls, domestic, pure bred, also homing or messenger pigeons, pheasants and quails for improvement of stock.....	Free	same
Fire clay gas retorts.....	20 p c	same	Fowls, other	20 p c	same
Fire clay retorts, crucibles	30 p c	same	Frames, clasps and fasteners, for purses and chatelaine bags or reticules, not more than 7 inches in diameter, when imported by the manufacturers of same in their factories....	20 p c	same
Fire clay	Free	same	Fringes.....	30 p c	35 p c
Fire works.....	25 p c	same	Fruit syrups, lime juice, and fruit juices, n.o.p.	20 p c	same
Fire hose, of cotton or linen, lined with rubber, or of rubber	32 p c	35 p c	Fruits, dried, desiccated, or evaporated apples, dates, figs, and other dried, etc., fruits, n.e.s.	25 p c	same
Fire dogs, iron	27½	25 p c	Fruits, dried, raisins, currants and prunes....	1c. per lb.	same
Fish, and the products thereof, from Newfoundland	Free	same	Fruits, bananas, plantains, pineapples, pomegranates, guavas, mangoes, shaddocks; wild blueberries, strawberries and raspberries..	Free	same
Fish skins and fish offal.....	Free	same	Fruits, green, grapes.....	2c. per lb.	same
Fish.—Mackerel, fresh	1c. per lb.	same	Fruits, green, blackberries, gooseberries, raspberries, strawberries, cherries, and currants.		
Herrings, pickled or salted.....	½ c. per lb.	same	The weight of the package to be included in the weight per duty, n.e.s.....	2c. lb.	same
Salmon, pickled or salted.....	1c. per lb.	same	Fruits in air-tight cans or other packages. The weight of the cans or packages to be included in the weight for duty.....	2¼ c. per lb.	same
Salmon, fresh.....	Free	½ c. per lb.	Fruits preserved in brandy and other spirits..	\$2 per 1m. gal.	same
All other fish, pickled or salted, in bbls..	1c. per lb.	same	Fuller's earth.....	Free	same
Foreign caught fish, imported otherwise than in bbls. or half bbls., whether fresh, dried, salted or pickled, n.e.s.....	50c. 100 lbs.	same	Fuller's earth, prepared.....	30 p c	25 p c
Smoked and boneless fish	1c. per lb.	same	Furniture, of wood, iron or any other material, for house, cabinet or office, fin. or in parts, including hair and spring and other mattresses, bolsters and pillows.....	30 p c	same
Anchovies and sardines, packed in oil or otherwise, in tin boxes, measuring not more than 5 in. long, 4 in. wide, and 3½ in. deep	5c. per box	same	Fur skins, of all kinds, not dressed in any manner	Free	same
In half boxes, measuring not more than 5 in. long, 4 in. wide, and 1½ deep....	2½ c. half box	same	Fur skins, wholly or partially dressed.....	15 p c	same
In quarter boxes, measuring not more than 4¾ in. long, 2½ wide and 1½ deep	2c. per quarter box	same	Fur hats, caps, muffs, tippets, capes, coats, cloaks and other manufactures of fur.....	25 p c	30 p c
Imported in any other form.....	30 p c	same	Galvanized Nails and Spikes , wrought and pressed.....	30 p c	same
Fish preserved in oil, except anchovies and sardines.....	30 p c	same	Galvanized sheet iron, number 17 gauge and thinner.....	5 p c	same
Salmon and all other fish prepared or preserved, including oysters, n.e.s.....	25 p c	same	Galvanic batteries.....	25 p c	same
Oysters, shelled, in bulk.....	10c. per gal.	same	Game.....	20 p c	same
Oysters, canned, in cans not over one pint	3c. per can, including cans	same	Gannister.....	Free	same
Oysters in cans over one pint and not over one quart.....	5c. per can, including cans	same	Gas and coal oil, or kerosene fixtures, or parts thereof	27½ p c	30 p c
Oysters in cans exceeding one quart	5c. for each qt. or fraction of a qt. of the capacity, including cans, 5c. qt.	same	Gas coke.....	Free	same
Oysters in the shell.....	25 p c	same	Gas meters.....	35 p c	same
Oysters, seed and breeding, imported for the purpose of being planted in Canadian waters.....	Free	same	Gas, for dentists and others.....	20 p c	same
Packages containing oysters or other fish not otherwise provided for.....	25 p c	same	Gelatine	25 p c	same
Oils, spermaceti, whale and other fish oils, and all other articles the produce of the fisheries, n.e.s.....	20 p c	same	Gentian and ginseng root.....	Free	same
Cans or packages made of tin or other material, containing fish of any kind....	.....	.....	German spirits of nitrous ether (sweet nitre), and 30 p c	\$2.25 inh. gal.	\$2.40 and 30 p c
Not exceeding one quart in contents.	1¼ c. on each can or pkg., and when exceeding one qt. an additional duty of 1½ c. for each additional quart or fractional part thereof.		German and nickel silver, manufactures of, not plated	25 p c	same
Fish hooks, nets, seines, lines and twines, not to include sporting fishing tackle or hooks with flies, or trolling spoons, or threads or twines commonly used for sewing or manufacturing purposes	Free	same	German and nickel silver, plated, n.e.s.....	30 p c	same
Fish hooks, n.e.s.....	27½ p c	30 p c	German silver, and silver in sheets	Free	same
Fish nets, seines	30 p c	same	Giant powder, dualin, dynamite and other explosives	4c. per lb.	3c. per lb.
Fishing rods.....	30 p c	same	Gilling twine, imported for the use of the fisheries	Free	same
Fishing hooks, with flies.....	30 p c	same	Gilling twines, linen thread.....	20 p c	same
Flagstones, sawn or otherwise dressed.....	30 p c	25 p c	Gilt ware, of all kinds, except jewellery.....	30 p c	same
Flannels, of every description, n.e.s. (wool),	5c. lb. and 25	35 p c	Ginger, preserved.....	30 p c	same
Flax, fibre.....	Free	same	Glacier, window decorations.....	6c. per lb. and	20 p c
Flax, tow of.....	Free	same	Glass, crystal and decorated table-ware, made expressly for mounting with silver-plated trimmings, when imported by manufacturers of plated ware.....	20 p c	same
Flax seed.....	Free	same	Glass, ornamented, figured and enamelled colored glass; painted and vitrified glass; figured, enamelled and obscured white glass, and rough rolled plate glass	25 p c	30 p c
Flax sail twine.....	5 p c	25 p c	Glass stained windows.....	30 p c	same
Flax, manufactures of, n.e.s.....	20 p c	25 p c	Glass, carboys and demijohns, empty or filled bottles and decanters, flasks and phials....	30 p c	same
Flint, flints and ground flint stones.....	Free	same	Glass, flasks and phials; telegraph and lighting rod insulators, jars and glass balls, and cut, pressed or moulded tableware.....	30 p c	same
Floor earthenware tiles	35 p c	same	Glass, lamp, gas and electric light shades, lamps and lamp chimneys, side lights and head lights, globes for lanterns, lamps, gas and electric lights, n.e.s.....	30 p c	same
Florist stock, viz., palms, orchids, azaleas, cacti and flower bulbs of all kinds.....	Free	same	Glass, all other, and manufactures of, n.o.p., including bent plate glass	20 p c	same

	Old.	New.		Old.	New.
Glass bulbs for electric lights.....	10 p c	same	Hatters' bands, bindings, tips and sides; linings, both tips and sides; hat sweats; when imported by hat manufacturers for use in their factories in the manufacture of hats....	Free	same
Glass, common and colorless window glass; and plain colored, stained, tinted or muffled glass in sheets.....	20 p c	same	Hay	\$2 per ton	same
Glass, imitation porcelain shades, and colored glass shades, not figured, painted, enamelled or engraved	30 p c	same	Hemlock bark	Free	same
Glass and emery paper.....	20 p c	35 p c	Hemp paper, made on four-cylinder machines and calendered to between .006 and .008 in. thickness, for manufacture of shot shells, primers for the manufacture of shot shells and cartridge and felt board, sized and hydraulic pressed and covered with paper or uncovered for the manufacture of gun wads, when such articles are imported by the manufacturers of shot shells, cartridges and gun wads, to be used for these purposes only in their own factories; provided always that the said articles when imported shall be entered only at such port or ports as may be named by the Controller of Customs, and at no other place	Free	same
Glass, German looking glass, unsilvered.....	17½ p c	20 p c	Hemp, undressed	Free	same
Glass, plate, not bevelled, in sheets or panes not exceeding 25 sq. ft. each, n.o.p.....	4 to 6c. sq. ft.	25 p c	Hemp, manufactures of, n.e.s.....	20 p c	25 p c
Glass, plate, not bevelled, in sheets or panes, n.e.s.....	.....	35 p c	Hickory spokes, rough turned, not tenoned, mitred, throated, faced, sized, cut to length, round tenoned or polished.....	Free	same
Glate plate, bevelled, in sheets or panes.....	.....	30 p c	Hides, raw, whether dried, salted or pickled..	Free	same
Glass, silvered	27½ p c	30 p c	Hob nails.....	30 p c	30 p c
Glass, silvered, bevelled	32½ p c	30 p c	Hoes.....	35 p c	25 p c
Glaziers' hacking and putty knives.....	35 p c	30 p c	Holly.....	20 p c	same
Gloves and mitts of all kinds.....	35 p c	same	Hominy, in barrels.....	40c. per barrel	same
Glue, sheet, broken sheet and ground	25 p c	same	Honey, in the comb or otherwise, and adulterations and imitations thereof	3c. per lb.	same
Glue, liquid	25 p c	same	Hoofs, horns and horn tips	Free	same
Glucose and glucose syrup	1¼c. per lb.	¾c. lb.	Hoop skirts and similar goods, n.e.s.....	32½ p c	25 p c
Glycerine	20 p c	same	Hops	6c. per lb.	same
Goat hair, unmanufactured	Free	same	Hop extract and hop roots.....	20 p c	same
Gold beaters' moulds and skins	Free	same	Horns, in the rough.....	Free	same
Gold laces, gold and silver cloth or thread ..	30 p c	35 p c	Horn strips.....	Free	same
Gold and silver bullion, in bars, blocks or ingots, and bullion fringe	Free	same	Horse clothing, shaped, n.o.p.....	5c. lb. & 30 p c	30 p c
Gold and silver ware, plated, n.e.s.....	30 p c	same	Horse clothing of jute, shaped or otherwise manufactured.....	30 p c	same
Gold medals	25 p c	30 p c	Horses, n.e.s.....	20 p c	same
Gold and silver leaf, and Dutch or schlag metal leaf.....	25 p c	25 p c	Hosiery, of silk	35 p c	same
Gold and silver, manufactures of, n.e.s.....	25 p c	30 p c	House furnishing hardware, rated according to material.....	.....	.....
Gongs for doors, as bells.....	25 p c	30 p c	Hubs, rough hewn or sawn only	Free	same
Gooseberry bushes	20 p c	same	Hymn books	Free	same
Grafting stock (see seedling stock)	Free	same	Hydrants, valves and watergates (iron).....	27½ p c	25 p c
Grape vines.....	20 p c	same	Ice	Free	same
Grain of all kinds when damaged by water in transitu (on appraised value)	20 p c	same	Ice boxes.....	30 p c	same
Granite ware, enamelled iron ware.....	35 p c	same	Illuminating oils, composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than 30c. per gal.....	25 p c	same
Grass, manilla and sea grass.....	Free	same	Incense	20 p c	same
Grass, manufactures of, n.e.s.....	20 p c	same	Intian corn of the varieties known as "Southern White Dent Corn," or horse tooth ensilage corn, and "Western Yellow Dent Corn," or horse tooth ensilage corn, when imported to be sown for soiling and ensilage only	Free	same [feed free when for 25c. per bbl.]
Gravels	Free	same	Indian corn.....	7½c. per bush.	free when for 25c. per bbl.
Grease, rough, the refuse of animal fat, when imported by the manufacturers of soap for use in their own factory only.....	Free	same	Indian corn meal	40c. per bbl.	same
Grease, axle	25 p c	same	Indian corn and corn meal, when damaged by water in transitu on appraised value.....	20 p c	same
Grease, foot, refuse of cotton seed after oil is pressed out.....	Free	same	India rubber boots and shoes with tops or uppers of cloth or of material other than rubber	30 p c	25 p c
Grease, other, n.e.s.....	20 p c	same	India rubber boots and shoes and other manufactures of India rubber, n.e.s.....	25 p c	same
Grindstones, not mounted, and not less than 36 inches in diameter .....	.....	15 p c	India rubber clothing, or clothing made waterproof with India rubber, n.e.s.....	35 p c	same
Grindstones, n.e.s.....	.....	25 p c	India rubber hose, belting, packing, mats and matting, and cotton and linen hose, lined with rubber.....	32½ p c	35 p c
Guano, and other animal and vegetable manures	Free	same	India rubber, unmanufactured	free	same
Gums, amber, Arabic, Australian, Elemly, Copal, Damar, Kaurie, Mastic, Sandarac, Senegal, and shellac; and white shellac in gum or flake, for manufacturing purposes; and gum Tragacanth, gum Gedda and gum Barbary	Free	same	India rubber, crude and hard rubber in sheets, but not further manufactured, and re-covered rubber and rubber substitute.....	free	same
Gum, British, Dextrine, sizing, cream and enamel sizing.....	10 p c	same	Indigo	free	same
Gum, sappato and chicle, crude	Free	same	Indigo auxiliary or zinc dust.....	free	same
Gum, opium, powdered	\$1.35 per lb.	same	Indigo paste and extract of.....	free	same
Gum, opium, prepared for smoking.....	\$5 per lb.	same	Infants' food, all kinds	30 p c	same
Gum, opium (drug).....	\$1 per lb.	same	Ink, for writing	20 p c	same
Gums, assafoetida, camphor and others, n.e.s.	20 p c	same	Ink, for printing	20 p c	same
Gunpowder, gun, rifle, sporting, cannon and musket, canister.....	3c. per lb.	same	Inkstands, n.e.s.....	30 p c	same
Gunpowder, blasting and mining.....	2c. per lb.	same	Insect powder, n.e.s.....	20 p c	same
Guns, rifles and muskets.....	20 p c	30 p c	Iodine, crude.....	free	same
Gut and worm gut, manufactured or unmanufactured, for whip and other cord.....	Free	same	Iodine, resublimed	20 p c	same
Gutta percha clothing, or clothing made waterproof with gutta percha.....	35 p c	same	Iris, orris root.....	free	same
Gutta percha, crude.....	Free	same	Isinglass.....	25 p c	same
Gutta percha, manufactures of.....	25 p c	same	Iron sand or globules and dry putty, for polishing granite.....	20 p c	same
Gypsum, crude (sulphate of lime)	Free	same	Iron borings.....	free	same
Hair, cleaned or uncleaned, but not curled or otherwise manufactured.....	Free	same	Iron liquor, solution of acetate of iron for dyeing and calico printing.....	free	same
Hair, curled	20 p c	same	Iron, oxide of, dry	25 p c	same
Hair cloth of all kinds	30 p c	same	Iron and steel and manufactures of:—	.....	.....
Hair mattresses.....	30 p c	same	Adzes	35 p c	30 p c
Hair, plasterers' and manufactures of, n.e.s...	20 p c	same	Anchors	free	same
Hair oils, pomatums and pastes, and all other perfumed preparations used for the hair, mouth and skin.....	30 p c	same	Angles for iron or composite ships or ves'ls	free	same
Hair pins.....	30 p c	same			
Hammers, blacksmith hammers.....	35 p c	30 p c			
Hammers, other, n.e.s.....	35 p c	30 p c			
Hammocks and lawn tennis nets and other like articles manufactured of twine, n.e.s...	30 p c	same			
Hams, salted, dried or smoked.....	2c. per lb.	same			
Harness and saddlery of every description, and parts of same	30 p c	same			
Hatchets, n.e.s.....	35 p c	30 p c			
Hat boxes.....	30 p c	same			
Hat covers of rubber	25 p c	same			
Hats, caps and bonnets, n.e.s.....	30 p c	same			
Hatters' plush, of silk or cotton, and furs not on the skin	Free	same			

	Old.	New.		Old.	New.
Angles, rolled iron or steel angles, channels, structural shapes and special sections, weighing less than 35 lbs. per lineal yard	35 p c, but not less than \$10 ton	\$7 per ton	Iron or steel, being pieces, punchings or clippings of boiler plate or other plates, sheets or bars of iron or steel, whether the same have had the ragged or cropped ends or edges sheared off or not, and crops from iron or steel rails having both ends sawn or sheared off, the same not having been in actual use and being fit for re-rolling or re-manufacture only	\$4 per ton 35 p c	\$1.00 per ton same
Angles, rolled iron or steel angles, channels and special sections, weighing not less than 35 lbs. per lineal yard, and rolled iron or steel beams, joists, girders, column sections, trough sections and other building or bridge structural sections, weighing not less than 25 lbs. per lineal yard, and rolled iron or steel bridge plate not less than $\frac{3}{4}$ of an inch thick, nor less than 15 inches wide, and flat eye bar blanks, not punched or drilled	12½ p c 35 p c	10 p c 25 p c	Engines, locomotive	27½ p c ½ c. per lb.	25 p c 15 p c
Axes, chopping axes	35 p c	25 p c	Engines, steam engines, boilers and machinery, composed wholly or in part of iron or steel, n.e.s.	5 p c	same
Axes of all kinds, adzes, hatchets and hammers, n.e.s.	\$20 per ton, but not less than 35 p c	35 p c	Fencing, buckthorn and strip, iron or steel.	35 p c	30 p c
Axles, springs and parts thereof, axle bars and axle blanks of iron or steel for railway or tramway vehicles	35 p c	35 p c	Ferro manganese, ferro silicon, speigel..	free	same
Axles, springs and parts thereof, axle bars and axle blanks of iron or steel, n.e.s.	1c. lb. & 20 p c	35 p c	Files and rasps	\$10 per ton	\$8 per ton
Balances	30 p c	same	Files, steel, for the manufacture of, when imported by file manufacturers for use in their factories	\$15 per ton	30 p c
Bars, crowbars	30 p c	same	Fish plates, railway fish plates and tie plates	10 p c	same
Bar iron, rolled or hammered, comp. rounds, squares and bars and shapes of rolled iron or steel, not more than four inches in diameter, and flats not thinner than No. 16 gauge, whether in coils, bundles, rods or bars, n.e.s.	\$10 per ton ¾ c. per lb.	\$7 per ton 15 p c till Jan. 1, '98, then free	Forgings of iron and steel, of whatever shape, or in whatever stage of manufacture, n.e.s., 35 per cent, but not less than	30 p c	same
Barbed wire and other wire for fencing...			Forks, table, cast iron, not handled or ground or otherwise further manufactured	free	same
Steel rails, weighing not less than 45 lbs. per lineal yard, for use in railway tracks; but this item shall not extend to rails for use in the tracks of railways used or intended for private purposes only, nor shall it extend to rails which are not used or intended to be used in connection with the business of common carrying of either goods or passengers, nor shall this item extend to rails for use in the tracks of street railways or tramways	free	same	Furniture of any material	35 p c	25 p c
Iron or steel railway bars or rails of any form, punched or not punched, n.e.s., for railways, which term for the purposes of this item shall include all kinds of railways, street railways and tramways, even although the same are used for private purposes only, and even although they are not used or intended to be used in connection with the business of common carrying of goods for passengers	30 p c	same	Garden rakes, hay knives, scythes, lawn mowers, rakes, n.e.s., pronged forks of all kinds and hoes	1c. per lb. and 20 p c	¾ c. per lb. and 25 p c
Boiler tubes of wrought iron or steel, including corrugated tubes or flues for marine boilers	7½ p c	5 p c	Hollowware, of cast or wrought iron, n.e.s.	27½ p c	30 p c
Bowls for cream separators (steel)	free	same	Hollowware, enamelled	35 p c	same
Bolts with or without threads or nuts, and bolt blanks	1c. lb. & 20 p c	35 p c	Horseshoes and horseshoe nails	30 p c	same
Bridges, iron and structural iron works ..	30 p c, but not less than 1c. lb.	35 p c	Hoop iron, not exceeding $\frac{3}{4}$ of an inch in width and being No. 25 gauge or thinner, used for the manufacture of tubular rivets	free	same
Bridge plate not less than $\frac{3}{4}$ of an inch thick, nor less than 15 inches wide	12½ p c	10 p c	Iron or steel sheets, hoops, bands and strips, n.e.s., other iron or steel of all widths, sheet iron, common or black, smoothed, polished, coated or galvanized, and Canada plates, No. 17 gauge and thinner	5 p c	same
Canada plates	5 p c	same	Iron or steel hoops, bands and strips, 8 inches and less in width, No. 18 gauge and thicker	\$10 per ton	\$7 per ton
Cast iron vessels, plates, stove plates and irons, sad irons, hatters' irons, tailors' irons	27½ p c	25 p c	Iron or steel plates or sheets, sheared or unsheared, and skelp iron or steel sheared or rolled in grooves, and iron or steel of all widths thicker than No. 17 gauge, n.e.s.	\$10 per ton	\$7 per ton
Castings, other, n.e.s., iron	25 p c	same	Iron or steel ingots, cogged ingots, blooms and slabs, billets and puddled bars, loops or other forms less finished than iron or steel bars, but more advanced than pig iron, except castings ..	\$5 per ton	\$2 per ton
Chain traces, iron	30 p c	30 p c	Iron or steel beams, sheets, plates, angles and knees, for iron or composite ships or vessels	free	same
Chains, iron or steel, 5-16 of an inch in diameter	5 p c	same	Iron masts for ships, or parts of	free	same
Chains, other, n.e.s.	27½ p c	.....	Wrought iron or steel nuts and washers, iron or steel rivets, bolts with or without threads, nut and bolt blanks, less than $\frac{3}{4}$ of an inch in diameter	1c. per lb. and 25 p c	¾ c. per lb. and 25 p c
Clock springs	25 p c	same	Wrought iron or steel nuts and washers, iron or steel rivets, bolts with or without threads, nut and bolt and hinge blanks, n.e.s., and T and strap hinges	1c. per lb. and 20 p c	¾ c. per lb. and 25 p c
Clock springs and corset steels, to be flat wire of steel of No. 16 gauge or thinner, to be used in the manufacture of dressed stays, crinoline and corset wire; steel of No. 20 gauge and thinner, but not thinner than No. 30 gauge, to be used in the manufacture of corset steels, clock springs and shoe shanks, when imported by the manufacturers of such articles for use in their factories	free	same	Iron, all articles rated as iron or manufacture of iron shall be chargeable with the same rate of duty, if made of steel, or of steel and iron combined, unless otherwise provided for		
Crowbars	30 p c	same	Knife blades or knife blanks in the rough, for use by electro-platers	10 p c	same
Crucible cast steel wire	free	same	Knives, reapers' and mowers' knives	20 p c	25 p c
Crucible sheet steel, 11 to 16 gauge, 2½ to 18 in. wide, when imported by manufacturers of mower and reaper knives for the manufacture of such knives in their own factories	free	same	Locks	32½ p c	30 p c
Wrought scrap iron and scrap steel, being waste or refuse wrought iron or steel, fit only to be re-manufactured, the same having been in actual use, not to include cuttings or clippings which can be used as iron or steel without re-manufacture, and steel bloom ends and crop ends of steel rails, \$3 per ton, and on and after the 1st day of January 1895	\$4 per ton	\$1.00 per ton	Locomotive and car wheel tires of steel, in the rough	free	same
			Manufactured articles of iron, brass or steel which at the time of their importation are of a class or kind not manufactured in Canada, imported for use in the construction or equipment of ships or vessels	free	same
			Manufactures, articles or wares not specially enumerated or provided for, composed wholly or in part of iron or steel, and whether partly or wholly manufactured	27½ p c 35 p c	30 p c 30 p c
			Mattocks		
			Nails and spikes, wrought and pressed, galvanized or not, horseshoe nails, and all other wrought iron or steel nails, n.e.s., and horse, mule or ox shoes	30 p c	same
			Nails, cut nails and spikes of iron or steel, including railroad spikes	¾ c. per lb.	¾ c. per lb.

	Old.	New.		Old.	New.
Nail rods, Swedish rolled iron, under ½ inch in diameter, for the manufacture of horse shoe nails and Swedish rolled iron rods, under ½ inch in diameter and of not less than 1¾c. per lb. in value.....	15 p c	same	Skates, steel for, valued at 2¼c. lb. & over	free	same
Nails, composition, spikes and sheathing nails.....	15 p c	same	Sledges.....	30 p c	same
Name plates, enamelled.....	35 p c	30 p c	Steels, table and butchers' steels.....	35 p c	30 p c
Needles, steel, viz., cylinder needles, hand frame needles and latch needles.....	30 p c	same	Steel of No. 12 gauge and thinner, but not thinner than No. 30 gauge, imported by manufacturers of buckle clasps and ice-creepers, to be used in the manufacture of such articles only in their own factories.....	free	same
Needles, steel, n.o.p.....	30 p c	same	Steel for the manufacture of hammers, augers, and auger bits, when imported by the manufacturers of such articles for use in their own factories only.....	free	same
Other steel, n.e.s.....	27½ p c	30 p c	Steel, Nos. 24 and 17 gauge, in sheets 63 inches long and from 18 inches to 32 inches wide for the manufacture of tubular bow sockets, when imported by the manufacturers for their own factories only.....	free	same
Picks, mattocks, grub-hoes, adzes, hatchets, and eyes or poles for same, and tools of all descriptions, n.e.s....	35 p c	30 p c	Steel, manufactures of, or parts of iron and parts steel, n.e.s.....	27½ p c	30 p c
Pig iron, iron kentledge and scrap iron..	\$4 per ton	\$2.50 per ton	Stoves.....	27½ p c	25 p c
Pipes, cast iron, \$10 per ton, but not less than.....	35 p c	\$8 per ton	Stove plates.....	27½ p c	25 p c
Planing mills, and parts of, in any stage of manufacture.....	30 p c	25 p c	Swords.....	27½ p c	30 p c
Plates, scraper plates.....	27½ p c	.....	Wedges.....	30 p c	same
Plates, engraved on steel.....	20 p c	.....	Iron and manufactures of, or part iron and part steel, n.e.s.....	27½ p c	30 p c
Plates, steel plates less than 30 in. wide and not less than ¼ of an inch thick..	12½ p c	10 p c	Strips specially imported for the manufacture of buckthorn and plain strip fencing for use in their factories.....	free	same
Plates, cast-iron plates, and stove plates, and irons, sad irons, hatters' irons and tailors' irons.....	27½ p c	25 p c	Tacks, cut, brads or sprigs, not exceeding 16 ounces to the thousand.....	1½c. per 1,000	35 p c
Plate, Canada plate.....	5 p c	same	Tacks, shoe, ½ to 4 oz. to the thousand..	1c. per 1,000	35 p c
Plates, saw plates, cut to shape only, not otherwise manufactured.....	free	same	Tacks, cut, brads or sprigs, exceeding 16 oz. to the thousand.....	1½c. per lb.	35 p c
Plough plate, mould boards and land sides, and other plates for agricultural implements, when cut to shape from rolled plates of steel, but not moulded, punched, polished or otherwise manufactured, and being of a greater value than 4c. a pound.....	5 p c	same	Track tools, wedges, crowbars and sledges	30 p c	30 p c
Portable steam engines, threshers, separators, horse power, portable saw mills and planing mills, and parts of.....	30 p c	25 p c	Traps.....	27½ p c	30 p c
Puddled bars.....	\$5 per ton	\$2 per ton	Tubing, wrought iron, over 2 inches in diameter.....	15 p c	same
Pumps of all kinds and wind mills.....	30 p c	25 p c	Tubing, of lap-welded iron, threaded and coupled or not, one and one-quarter to two inches inclusive in diameter, for use exclusively in artesian wells, petroleum pipe lines and petroleum refineries....	20 p c	.....
Railway bars and rails, iron or steel, for railways and tramways. (See steel rails)			Tubes not welded nor more than 1½-inch in diameter of rolled steel.....	15 p c	10 p c
Rivets, iron or steel, bolts with or without threads, or nut or bolt blanks. (See wrought iron or steel nuts, etc.)			Tubes or pipes, either wrought iron or steel.....	5-10c. & 30 p c	30 p c
Rods of steel, rolled, under half an inch in diameter, or under half an inch square, imported by knob or lock manufacturers, or cutlers, for use exclusively in such manufacture in their own factories.....	free	same	Washers, n.e.s.....	1c. lb. & 20 p c	25 p c
Rolled iron tubes, not welded, under 1½ in. in diameter; angle iron, 9 and 10 gauge, not over 1½ in. wide; iron tubing, lacquered or brass covered, not over 1½ in. diameter, all of which are to be cut to lengths for the manufacture of bedsteads, and to be used for no other purpose; when imported for the manufacturers of iron bedsteads, to be used for these purposes only, in their own factories, until such time as any of the said articles are manuf'd in Canada....	free	same	Provided that on all iron and steel bars, rods, strips or steel sheets of whatever shape, and on all iron or steel bars of irregular shape or section, cold rolled, cold hammered or polished in any way, in addition to the ordinary process of hot rolling or hammering, there shall be paid one-sixth of one cent per pound in addition to the rate imposed on the said materials.		
Rope, raw hide, as belting, being so used.	20 p c	same	And provided, further, that all articles rated as iron or manufactures of iron shall be chargeable with the same rate of duty if made of steel, or of steel and iron combined, unless otherwise specially provided for.		
Safes, doors for safes and vaults, scales, balances and weighing beams of iron or steel.....	30 p c	same	Ivory knives and folders and fancy manuf's ..	35 p c	30 p c
Saws of all kinds.....	32½ p c	30 p c	Ivory and ivory nuts, unmanufactured and veneers, sawn only.....	free	same
Scrap iron and scrap steel, old, and only fit to be remanufactured, being part of or recovered from any vessel wrecked in water subject to the jurisdiction of Canada.....	free	same	Ivory veneer, other.....	20 p c	.....
Screws, commonly called wood screws—2 inches or over in length.....	3c. per lb.	35 p c	Ivory, manufactures of, n.e.s.....	20 p c	same
1 inch and less than 2 inches in length.	6c. per lb.	35 p c	Ivory vaccine points.....	free	same
Less than 1 inch, 8c. per lb., provided that the duty shall not be less than..	35 p c	35 p c	Jack Screws of every description, n.e.s....	35 p c	same
Screws, iron, steel, brass, or other metals, n.e.s.....	30 p c	35 p c	Jalap root.....	free	same
Scythes.....	35 p c	25 p c	Jams, jellies and preserves.....	3¼c. per lb.	same
Sheet iron, common or black, No. 17 gauge and thinner.....	5 p c	same	Japanned and stamped tinware, etc.....	25 p c	same
Sheet iron signs, not framed.....	25 p c	30 p c	Jerseys, ladies'.....	5c. lb. and	30 p c
Sheet iron. (See iron or steel sheets, etc.)			Jewellery and manufactures of gold and silver	25 p c	30 p c
Sheet iron, for iron or composite ships..	free	same	Jews' harps.....	35 p c	same
Sheets, crucible sheets, steel, 11 to 16 gauge, 2¼ to 18 inches wide, imported by manufacturers of mower and reaper knives for manufacture of such knives in their own factories.....	free	same	Junk, old.....	free	same
Shoes, horse, mule and ox shoes.....	30 p c	same	Jute and jute butts.....	free	same
Shovels and spades, shovel and spade blanks, and iron or steel cut to shape for same.....	50c. per doz. and 25 p c	35 p c	Jute, carpeting or matting and mats.....	25 p c	same
Skates.....	10c. per pair 30 p c	35 p c	Jute cloth, as taken from the loom, neither pressed, mangled, calendered, nor in any way finished.....	free	same
			Jute, colored fabrics, part cotton, yarns or other material.....	30 p c	25 p c
			Jute, manufactures of, n.e.s.....	20 p c	25 p c
			Jute yarn, flax or hemp, plain dyed or colored, when imported by manufacturers of carpets, rugs, mats, jute webbing or cloth, and twines, for use in their own factories.....	free	same
			Kainite, or German potash salts for fertilizers	free	same
			Kelp.....	free	same
			Kerosene and coal oil fixtures or parts thereof	27½ p c	30 p c
			Knives, oyster knives.....	35 p c	30 p c
			Knitting machines.....	27½ p c	25 p c
			Knitting needles and machine needles and needles of all kinds.....	30 p c	same
			Kryolite or cryolite.....	free	same

	Old.	New.		Old.	New.
Labels, for fruit, vegetables, meat, fish, confectionery, and other goods, also tickets, posters, advertising bills and folders, whether lithographed or printed.....	15c. per lb. and	35 p c	prior to the 16th day of May, 1896, which is at the time of its importation of a class or kind not manufactured in Canada.....	free	same
Lac-dye, crude, seed, button, stick and shell.	25 p c	same	Madder and munjeet, or Indian madder, ground and prepared, and all extracts of ..	free	same
Laces, boot, shoe and stay	30 p c	same	Magic lanterns and slides therefor, philosophical, photographic, mathematical and optical instruments, n.e.s.....	25 p c	same
Laces, braids, fringes, embroideries, cords, tassels, and bracelets, elastic, round or flat, including garter elastic, braids, chains or cords of hair; lace collars and all similar goods, lace nets and nettings of cotton, silk, linen or other materials, table cloths and curtains, when made up, trimmed or untrimmed, and belts of all kinds.....	30 p c	35 p c	Magnesia.....	20 p c	25 p c
Lamb and sheepskins, tanned, dressed, waxed or glazed.....	17½ p c	same	Magnesia fluid	50 p c	same
Lamp reflectors.....	30 p c	same	Malt, upon entry for warehouse, subject to Excise regulations.....	15c. per bush.	same
Lamp shades, made of paper.....	35 p c	same	Malt, extract of (non-alcoholic), for medical purposes, n.e.s.....	25 p c	same
Lamp wicks.....	25 p c	same	Manganese, oxide of	free	same
Lamp springs.....	10 p c	same	Mangles	27½ p c	25 p c
Lamp black and ivory black.....	free	same	Manilla hoods	20 p c	same
Lap robes, rubber.....	35 p c	same	Mantels, slate.....	30 p c	same
Lard and lard compound, and similar substances, cottolene and animal stearine of all kinds, n.e.s.....	2c. per lb.	same	Manures, guano and other manures	free	same
Lard oil	20 p c	25 p c	Manuscripts and insurance maps.....	free	same
Lastings, mohair cloth or other manufactures of cloth when imported by manufacturers of buttons for use in their own factories and woven or made in patterns of such size, shape or form, or cut in such manner as to be fit for covering buttons exclusively	free	same	Maps, charts, for the use of schools for the blind, and globes, geographical, topographical and astronomical, n.e.s.....	free	same
Lava, unmanufactured	free	same	Marble blocks from the quarry, in the rough ..	free	same
Lava, manufactures of, fancy	35 p c	same	Maple sugar	20 p c	same
Lead bars, blocks and sheets.....	60c. 100 lbs.	25 p c	Marble blocks and slabs, sawn on more than two sides	20 p c	same
Lead, old scrap and pig.....	40c. 100 lbs.	15 p c	Marble slabs, sawn on not more than two sides	10 p c	20 p c
Lead pipe and shot	4-10c. lb. and	35 p c	Marble, finished, and all manufs. of, n.e.s....	30 p c	35 p c
Lead, nitrate and acetate of, not ground	25 p c	same	Matches, wax or wood	25 p c	same
Lead pencils of all kinds, in wood or otherwise	25 p c	same	Mattresses, hair, spring and other	30 p c	same
Lead, manufactures of, n.e.s.....	30 p c	same	Matting, cocoa	25 p c	same
Leather, upper, including dongola, cordovan, kid, lamb, sheep, kangaroo, alligator, chamois, and calf, dressed, waxed or glazed...	17½ p c	same	Meats, fresh, n.e.s.....	3c. per lb.	same
Leather and skins, n.o.p., tanned, belting leather and sole leather.....	15 p c	same	Meats, canned, and canned poultry and game	25 p c	same
Leather belting or other material, n.e.s.....	20 p c	same	Mand soups	25 p c	same
Leather board and leatheroid, and boot and shoe counters made therefrom	20 p c	25 p c	Meats, extract of fluid beef not medicated....	25 p c	same
Leathers, glove, when imported by glove manufacturers for use in their factories in the manufacture of gloves, viz., lamb, kid, buck, deer, antelope and water-hog, tanned or dressed, colored or uncolored.....	10 p c	same	Meats, n.e.s.....	2c. per lb.	same
Leather, morocco skins, tanned, but not further manufactured.....	15 p c	same	When in barrel, the barrel to be free.		
Leather, patent, japanned or enamelled, and morocco leather.....	22½ p c	25 p c	Meat stuffers	27½ p c	25 p c
Leather, sole, tanned, but rough or undressed	10 p c	15 p c	Meats, poultry and game, n.o.p.....	20 p c	same
Leeches	free	same	Meats, mutton and lamb, fresh.....	35 p c	same
Lentils, fresh	25 p c	same	Medals, gold or silver	25 p c	30 p c
Lime juice and fruit juices containing not more than twenty-five per cent. of proof spirits	60c. per gal.	same	Medals, German or nickel silver	25 p c	same
When more than 25 per cent.,.....	\$2 per gal.	same	Medals, brass, bronze or plated	30 p c	same
Lime juice and other fruit juices, n.o.p.....	20 p c	same	Medicines, patent, proprietary, viz.: All tinctures, pills, powders, troches or lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, paste, drops, waters, essences, oils, and all medicinal, chemical and pharmaceutical preparations, when compounded of more than one substance, n.o.p., all liquids, 50 per cent.; provided that this item shall not be held to include drugs and preparations recognized by the British and the United States Pharmacopœia and French Codex as official.	25 p c	25 and 50 p c
Lime juice, crude only	free	same	Medicines, patent, all other, n.e.s.....	25 p c	same
Lime	20 p c	same	All medicinal preparations, whether chemical or otherwise, usually imported with the name of the manufacturer, shall have the true name of such manufacturer, and the place where they are prepared, permanently and legibly affixed to each parcel by stamp, label or otherwise, and all medicinal preparations imported without such names so affixed shall be forfeited.		
Lime, chloride of	free	same	Meerschbaum, crude or raw.....	free	same
Linen, damask	25 p c	30 p c	Menageries, horses, cattle, carriages and harnesses of, under regulations prescribed by the Controller of Customs	free	same
Linen canvas, when to be used for boats and ships' sails	25 p c	same	Mercury or quicksilver	free	same
Licorice paste	20 p c	same	Metal composition, n.e.s.....	20 p c	same
Licorice root, not ground	free	same	Metal, yellow metal in bars, bolts, and for sheathing.....	free	same
Licorice, stick or roll	20 p c	same	Mica.....	20 p c	same
Litharge	free	same	Microscopes	25 p c	same
Lithographic presses	10 p c	same	Milk food and other similar preparations.....	30 p c	same
Lithographic stones, not engraved	20 p c	same	Milk, condensed	3¼c. per lb.	same
Litmus and all lichens, prepared and not prepared	free	same	Coffee, condensed, with milk.....	30 p c	same
Lobsters, preserved.....	25 p c	same	Mill board, not straw board	10 p c	same
Lobsters, alive	20 p c	same	Mineral waters, natural, not in bottles	free	same
Locks, other, n.e.s	32½ p c	30 p c	Mineral waters, n.e.s.	20 p c	same
Locomotives and railway passenger, baggage and freight cars, being the property of railway companies in the U. S. running upon any line of road crossing the frontier so long as Canadian locomotives and cars are admitted free under similar circumstances into the U. S., under regulations to be prescribed by the Controller of Customs	free	same	Mineral and bituminous substances, n.e.s....	20 p c	same
Locust beans and locust bean meal.....	free	same	Mineralogy specimens.....	free	same
Logwood, fustic, oak and oak bark, extracts of	20 p c	same	Models (original) of inventions and other improvements in the arts; but no article or articles shall be deemed a model which can be fitted for use.....	free	same
Logwood, compound extracts of.....	free	same	Molasses, produced in the process of the manufacture of cane sugar from the juice of the cane, when imported in the original packages from the district where produced in the country where the cane was grown, and which has not been subjected to any process of treating or mixture after leaving the country from which originally shipped.		
Logs and round unmanufactured timber, n.e.s.	25 p c	same	(a) Testing by polariscope, 40° or over, a specific duty of 1¼c. per gal		same
Mace and nutmegs.....	25 p c	same	(b) When testing less than 40°, and not less than 35°, a specific duty of 1¼c. per		
Macaroni and vermicelli.....	27½ p c	25 p c			
Machines, dating	27½ p c	25 p c			
Machinery, n.e.s.....	27½ p c	25 p c			
Machinery, mining and smelting, imported					

	Old.	New.		Old.	New.
gal., and in addition thereto 1c. per gal. for each degree or fraction of a degree less than 40°		same	Oiled paper	35 p c	.....
The packages (when of wood) in which imported to be exempt from duty.			Oleo-stearine and degreas, when imported by manufacturers of leather for use in the manufacture of leather in their factories	free	same
Molasses gates	27½ p c	.....	Opium, crude	\$1 per lb.	same
Molasses and syrups of all kinds, n.o.p., the product of the sugar cane or beet root, n.e.s., and all imitations thereof or substitutes therefor	¾c. per lb.	same	The outward ball or covering	free	same
Moss, Iceland and other mosses, and seaweed and seagrass, crude or in their natural state, or cleaned only	free	same	Opium, prepared for smoking	\$5 per lb.	same
Moss, other, n.e.s.	20 p c	same	Opium, powdered	\$1.35 per lb.	same
Mouldings of wood, plain	20 p c	25 p c	Optical instruments, n.e.s.	25 p c	same
Mouldings of wood, gilded, or otherwise further manuf. than plain	25 p c	25 p c	Oranges, lemons and limes, in boxes of capacity not exceeding 2½ cubic feet	25c. per box	same
Mowing machines, self-binding harvesters, harvesters without binders, binding attachments, reapers, sulky and walking ploughs, harrows, cultivators, seed drills and horse rakes	20 p c	same	In half boxes, capacity 1¼ cubic feet	13c. per box.	same
Muslin, plant bed muslin, white cotton	25 p c	same	In cases and all other packages	10c. per cu. ft.	same
Music, printed, bound or in sheets	10c. per lb.	10 p c	In bulk	capacity	
Musical instruments, n.o.p.	25 p c	30 p c	In barrels not exceeding in capacity that of the 196 lb. flour barrels	\$1.50 per 1,000	same
Musk, in pods or in grains	free	same	Ores of metals, of all kinds	free	same
Mustard cake	15 p c	same	Organs, cabinet	30 p c	same
Mustard, ground	25 p c	same	Organs, sets or parts of sets of reeds for cabinet organ	25 p c	same
Mustard, French mustard, liquid, as sauce ..	35 p c	same	Organs, pipe organs	25 p c	30 p c
Naphtha, wood naphtha, or wood alcohol ..	\$2.25 Im. gal.	\$2.40 Im. gal.	Ornaments of alabaster, spar, amber and terra cotta, or composition	35 p c	same
Naphtha, n.e.s.	6c. Im. gal.	5c. Im. gal.	Osiers	free	same
Needles, knitting	30 p c	same	Osiers and willow furniture	30 p c	same
Needles, steel, all other	30 p c	same	Ottar of roses and oil of roses	free	same
Newspapers or supplemental editions or parts thereof, partly printed and intended to be completed and published in Canada	25 p c	same	Oxide of copper, black and platinum, for use in the manufacture of chlorate	free	same
Newspapers and quarterly, monthly and semi-monthly magazines, and weekly literary papers, unbound	free	same	Pails, tubs, churns, brooms, washboards, pounders and rolling pins	20 p c	same
Newspapers and magazines, if bound	6c. per lb.	20 p c	Paints and colors, ultramarine blue, dry or in pulp, metallic colors, viz.: oxides of cobalt, copper and tin, n.e.s.	free	same
Nickel	free	same	Ochres, ochrey earths, raw siennas and colors dry, n.e.s.	20 p c	same
Nickel anodes	10 p c	same	Oxides, dry fillers, fire-proofs, umbers and burnt siennas, n.e.s.	25 p c	same
Nickel and German silver, manf. of, not plated if plated	30 p c	same	Fire-proof paint, dry	25 p c	same
Nitrate of soda or cubic nitre	free	same	Paints and colors, rough stuff and fillers, n.e.s.	25 p c	same
Nitrate of soda	free	same	Ground in spirits, and all spirit varnishes and lacquers	\$1.12½ gal.	same
Nitrate of lead, not ground	free	same	Paris green, dry	10 p c	same
Nitro glycerine	4c. per lb.	3c. per lb.	Dry white and red lead, orange mineral and zinc white	5 p c	same
Noils, being the short wool which falls from the combs in worsted factories	free	same	White lead in bulk, not mixed with oil ..	25 p c	same
Numbering machines, not to be classed with printing presses	27½ p c	25 p c	Painters' metal graining combs	35 p c	same
Nuts, shelled, n.e.s.	5c. per lb.	same	Painters' pallet knives	35 p c	30 p c
Nuts, almonds, walnuts, Brazil nuts, pecans and shelled peanuts, n.e.s.	3c. per lb.	same	Paintings in oil or water colors, by artists of well-known merit, or copies of Old Masters by such artists	free	same
Nuts, cocoa	\$1 per 100	same	Paintings in oil or water colors, production of Canadian artists	free	same
Nuts, cocoa, when imported direct	50c. per 100	same	Paintings, prints, engravings, drawings and building plans, photos and pictures, n.e.s. ...	20 p c	same
Nuts, all kinds, n.o.p.	2c. per lb.	same	Palm leaf, unmanufactured	free	same
Nutgalls	free	same	Palm leaf, when manufactured, n.e.s.	20 p c	same
Oakum	free	same	Paper weights, glass	30 p c	same
Oak bark	free	same	Paper cutters and printing presses	10 p c	same
Oats	10c. per bush.	same	Paper bags, plain, n.e.s.	25 p c	same
Oat flour	20 p c	same	Paper boxes, with chromos, but without any printed matter	6c. lb. & 20 p c	35 p c
Oatmeal	20 p c	same	Paper boxes, labelled empty	15c. lb. & 25 pc	35 p c
Oil, aniline, crude	free	same	Paper, drawing, mounted, enamelled or parchment	35 p c	same
Oil, coal, illuminating oils composed wholly or in part of the products of petroleum, coal, shale or lignite costing more than 30c. per gal.	25 p c	same	Paper hangings, all other, and borders, per roll of 8 yds. and under, and proportionately for greater lengths	1½ roll & 25 pc	35 p c
Oil, coal and kerosene, distilled, purified or refined, naphtha, petroleum and products of, n.e.s.	6c. Im. gal.	5c. imp. gal.	Paper, wall, not including borders, printed on plain ungrounded paper, and colored with any material except bronze, gilt or flitter ..	35 p c	35 p c
Oils, petroleum, crude, fuel and gas oils (other than naphtha, benzine or gasoline, when imported by manufacturers other than refiners) for use in their factories for fuel purposes or for the manufacture of gas	3c. per gal.	2½c. per gal.	Paper files, clips	30 p c	same
Oil, carbolic or heavy oil	free	same	Papier mache, manufactures of	35 p c	same
Oil, castor	20 p c	same	Paper of all kinds, n.e.s.	25 p c	same
Oil, cod liver	20 p c	same	Paper kites, as toys	35 p c	same
Oils, cocoanut and palm, in their natural state ..	free	same	Paper, ruled, oiled or waxed	35 p c	same
Oil, colza	20 p c	same	Paper, tarred	25 p c	same
Oil, flax seed or linseed, raw or boiled	20 p c	25 p c	Paper, union collar cloth, in rolls or sheets, not glossed or finished	15 p c	same
Oil, hair, perfumed	30 p c	same	Paper, union cloth, in rolls or sheets, glossed or finished	20 p c	same
Oil, lard oil	20 p c	25 p c	Paper, filter paper, in sheets	25 p c	same
Oils, lubricating, composed wholly or in part of petroleum, costing less than 25c. Im. gal.	6c. Im. gal.	5c. imp. gal.	Paper, fly paper	35 p c	25 p c
Oils, lubricating, all other	25 p c	same	Paper letters, gummed, plain or colored, in bulk	35 p c	same
Oils, neatfoot	20 p c	25 p c	Paper letters, gummed, put up in envelopes, with printed descriptions for special advertising purposes, signs or labels	15c. lb. & 25 pc	15c. lb.
Oil, olive, for manufacturing purposes	free	same	Paper sacks or bags of all kinds, printed or not	25 p c	same
Oil, olive, prepared for salad purposes	30 p c	20 p c	Paper, waste or clippings	free	same
Oil, sesame seed	20 p c	25 p c	Paper, pressed, in sheets	35 p c	same
Oil, tallow	20 p c	same	Paper, glazed, plated, marbeled, enamelled paper, and card board, similarly finished n.e.s.	35 p c	same
Oil, all other, n.e.s.	20 p c	same	Paper, manufactures of, including ruled and bordered papers, papeteries, boxed papers and envelopes and blank books	35 p c	same
Oil cake and meal, cotton seed cake and meal, palm nut cake and meal	free	same	Parasols. (See umbrellas)		
Oil cloths and silk India rubbered, flocked or coated with rubber, n.o.p.	27½ p c	30 p c	Patterns of brass	30 p c	same
Oil cloth, table and shelf, enameled floor, cork matting or carpet and linoleum	30 p c, but not less than 4c. per sq. yd.	30 p c			

	Old.	New.		Old.	New.
Passover bread for free distribution among the Hebrew community in connection with their religious rites.	free	same	Pipe clay, unmanufactured	free	same
Patterns of iron or steel	27½ p c	30 p c	Pitch, Burgundy	free	same
Paving blocks, made from slag of blast furnace	20 p c	same	Pitch, pine, in packages of not less than 15 gals.	free	same
Peaches, n.o.p., the weight of the package to be included in the weight for duty	1c. per lb.	same	Pitch, pine, other	20 p c	same
Peach trees	3c. each	same	Pitch coal, for roofing	free	same
Pears, green fruit	20 p c	same	Pitch, bone, crude only	free	same
Pear trees of all kinds	3c. each	same	Plaits, straw, Tuscan, grass, chip, manilla, cotton and mohair	free	same
Peas	10c. bush.	same	Planing mills and parts of, in any stage of manufacture	30 p c	25 p c
Pearl, mother of, not manufactured	free	same	Plants, viz.: Fruit, shade, lawn and ornamental trees, shrubs and plants, n.e.s.	20 p c	same
Pearl card cases	35 p c	same	Plaster of Paris or gypsum, ground not calcined	15 p c	same
Pearl collar buttons or studs as jewel'ry	25 p c	30 p c	Plaster of Paris, calcined or manufactured	40c. per bbl. of 300 lbs.	12½c. 100 lbs.
Pearl, manufactures of, fancy	35 p c	same	Plasters, medicated, all kinds	25 p c	same
Pelts, raw	free	same	Plated ware and gilt ware, of all kinds, whether plated wholly or in part	30 p c	same
Pencils, lead, wood or otherwise	25 p c	same	Platinum and black oxide of copper for the manufacture of chlorate	free	same
Pencils, slate	25 p c	same	Plates, engraved on wood, steel or other metal, and transfers taken from the same	20 p c	same
Penholders, wood	25 p c	same	Playing cards	6c. per pack	same
Pens, steel	27½ p c	30 p c	Plum trees, of all kinds	3c. each	same
Pens, gold	20 p c	same	Plumbago, crude	10 p c	same
Pen racks, iron	27½ p c	25 p c	Plumbago, all manufactures of, n.e.s.	25 p c	same
Perfumery, including toilet preparations (non-alcoholic), viz: Hair oils, tooth and other powders and washes, pomatums, pastes and all other perfumed preparations used for the hair, mouth and skin	30 p c	same	Plush, of cotton	30 p c	35 p c
Perfumed spirits in bottles or flasks not weighing more than 4 oz.	50 p c	same	Plush, silks, other	30 p c	same
Perfumed spirits in bottles, flasks or other packages, weighing more than 4 oz.	\$2.25 1m. gal. and 40 p c	\$2.40 gal. and 40 p c	Pocketbooks and purses	30 p c	same
Persis or extract archill and cudb'r	free	same	Pomades, French or flower odors, preserved in fat or oil for the purpose of conserving the odors of flowers which do not bear the heat of distillation, when imported in tins of not less than 10 lbs. each	15 p c	same
Petroleum, crude, fuel and gas oils (other than naphtha, benzine or gasoline), when imported by manufacturers (other than refiners), for use in their factories for fuel purposes, or for the manufacture of gas	3c. per gal.	2½c. gal.	Pomades, all others	30 p c	same
Petroleum. (See Oils.)			Pop corn, in cakes or balls	35 p c	same
Pheasants for improvement of stock	free	same	Porcelain ware, n.e.s.	30 p c	same
Pheasants, other	20 p c	same	Porcelain shades	30 p c	same
Philosophical instruments and apparatus, not manufactured in the Dominion, and when imported by or for the use of universities, colleges and schools and scientific societies	free	same	Portable machines, portable steam engines, threshers and separators, horse powers, portable saw mills and planing mills and parts thereof in any stage of manufacture	30 p c	25 p c
Philosophical, photographic, optical and mathematical instruments and apparatus, n.e.s.	25 p c	same	Potash, muriate and bichromate of, crude	free	same
Phosphorus	free	same	Potash, chlorate of, in crystals or ground only, when imported for manufacturing purposes only	free	same
Phosphor bronze in blocks, bars, sheet and wire	10 p c	same	Potash, German mineral	free	same
Photograph albums	35 p c	same	Potash, red and yellow prussiate of	free	same
Album insides of paper	free	same	Potatoes, sweet	10c. bushel	same
Photographers' albumenized paper	30 p c	same	Pork, barrelled in brine (barrels containing same to be free of duty)	2c. per lb.	same
Photographic dry plates	30 p c	same	Poultry and game of all kinds	25 p c	15c. bush.
Piano covers, rubber and cotton	27½ p c	35 p c	Precious stones, in the rough	20 p c	same
Piano stools	30 p c	same	Precious stones, also imitations, polished, but not set or otherwise manufactured, n.e.s.	free	same
Pianofortes	35 p c	30 p c	Printing presses and printing machines, such only as are used in newspaper, book and job printing offices; folding machines and paper cutters used in printing and bookbinding establishments, and lithographic presses.	10 p c	same
Pianofortes, parts of	25 p c	same	Prunella	free	same
Pickers, raw hide, for cotton looms	20 p c	25 p c	Pulp wood	25 p c	same
Pickles, sauces and catsups, including soy	35 p c	same	Pulp or grasses	free	same
Pictorial illustrations of insects, etc., when imported by and for the use of colleges and schools, scientific and literary societies	free	same	Pumice or pumice stone, ground or unground	free	same
Picture and photographic frames, of any material	30 p c	same	Pumps, of all kinds	30 p c	same
Picture nails	32½ p c	30 p c	Pumps, steam	30 p c	25 p c
Pictures, framed	30 p c	same			
Pillows and bolsters	30 p c	same			
Pins, manufactured from wire of any metal	30 p c	same			

	Old.	New.		Old.	New.
Putty	15 p c	same	Sateens, for use of corset manufactur-		
Putty, dry, for polishing granite	free	same	ers, etc.	25 p c	same
Quills , in natural state or unpl'd.	free	same	Sauces, catsups and pickles, including		
Quills, other	20 p c	same	soy	35 p c	same
Quince trees of all kinds	3c. each	same	Sausage skins or casings, not cleaned.	free	same
Quinine, sulphate of, in powder	free	same	Sawdust, of the following woods: ama-		
Rags of cotton, linen, jute, hemp and			ranth, cocoboral, boxwood, cherry,		
woolen, paper waste or clippings,			chestnut, walnut, gumwood, ma-		
and waste of any kind except mineral			hogany, pitch pine, rosewood, sandal		
waste	free	same	wood, sycamore, Spanish cedar, oak,		
Rags from Europe, except Great Britain,			hickory, whitewood, African teak,		
prohibited			black heart ebony, lignum vitæ, red		
Railway rugs of all materials.	30 p c	same	cedar, red wood, satin wood, white		
Raisins	1c. per lb.	same	ash, persimmon and dogwood.	free	same
Raspberry and blackberry bushes	20 p c	same	Scales, and weighing beams.	30 p c	same
Rattans and reeds, manufactured or			Scenery, theatrical and other	20 p c	same
partly manufactured	17½ p c	15 p c	School ink wells.	30 p c	same
Rattans and reeds in their natural state	free	same	School bags.	30 p c	same
Red liquor for dying and calico printing	free	same	Screws, commonly called wood screws,		
Refrigerators	30 p c	same	2 in. and over in length	3c. lb.	35 p c
Rennet, raw or prepared	free	same	1 in. and less than 2	6c. lb.	35 p c
Resin, in pkgs, not less than 100 lbs. .	free	same	Less than 1 in., 8c. lb., provided		
Resin or rosin oil	free	same	that duty shall not be less than	35 p c	same
Resin, other, n.e.s.	20 p c	same	Screws, of brass or other metals, n.e.s. .	30 p c	35 p c
Ribbons of all kinds and materials ...	30 p c	35 p c	Screw jacks of every description.	35 p c	same
Rice, uncleaned, unhulled or paddy,			Seeds—beet, carrot, turnip, annatto,		
3-10c. per lb., but not less than	30 p c	½ c. per lb.	flax, mangold and mustard.	free	same
Rice, other	1¼ c. lb.	same	Seeds—flower, garden, field and other		
Rice and sago flour and sago	25 p c	same	seeds for agricultural or other pur-		
Rice, when imported by makers of rice			poses, when in bulk or large parcels,		
starch, for use in their own factories. .	¾ c. lb.	same	n.o.p.	10 p c	same
Rope, iron wire.	25 p c	same	The same in small parcels	25 p c	same
Rope, or cordage	1¼ c. lb. and	20 p c	Seeds—aromatic, which are not edible		
	10 p c		and are not in a crude state, and not		
Roots, medicinal, viz., aconite, cal-			advanced in value or condition by		
umba, ipecacuanha, rhubarb, sarsa-			grinding or refining, or by any other		
parilla, squills, taraxicum and val-			process of manufacture, anise, anise		
erian	free	same	star, caraway, cardamom, coriander,		
The same ground or powdered ..	20 p c	same	cummin, fennel and fenugreek	free	same
Rose bushes	20 p c	same	Seed peas—imported from the United		
Rotten stone	20 p c	same	Kingdom for the purpose of seed. .	free	same
Rove, when imported for the manufac-			Seedling stock for grafting, viz., plum,		
ture of twine for harvest binders ...	10 p c	5 p c	pear, peach and other fruit trees ...	free	same
Ruling pens	10 p c	same	Senna leaves	free	same
Rye (see grain)	10c. bush.	same	Settlers' effects	free	same
Rye flour	50c. bbl.	same	Sewing machines, or parts of	30 p c	same
Saccharine or any product containing			Shades, glass and porcelain, for lamps		
over one-half of one per cent. thereof.	20 p c	same	and gaslights.	30 p c	same
Saddlers' soap	25 p c	35 p c	Shawls and traveling rugs of all kinds.	25 p c	30 p c
Saddlery of every description	30 p c	same	Shawls, silk.	25 p c	30 p c
Saffron and safflower, and extracts of,			Sheep, for improvement of stock.	free	same
and saffron cake.	free	same	Sheep skins, tanned only	15 p c	same
Sago	25 p c	same	Sheep skins, dressed and waxed, or		
Sago flour	25 p c	same	glazed	17½ p c	same
Sails, for boats and ships, also tents			Shellac, white, for manuf'g purposes. .	free	same
and awnings	25 p c	same	Shells of all kinds, unmanufactured ..	free	same
Sal ammoniac and sal soda	free	same	Shells, manufactured, fancy.	35 p c	same
Saleratus	20 p c	same	Sheet music	10c. lb.	10 p c
Salt, imported from the United King-			Sheet iron signs, not framed	25 p c	30 p c
dom or any British possessions, or			Ships, built in a foreign country, on		
imported for the use of the sea or the			application for Canadian register,		
gulf fisheries, n.e.s.	free	same	except machinery	10 p c	same
Salt, fine, in bulk, and coarse salt,			Machinery on same	25 p c	same
n.e.s.	5c. 100 lbs.	same	Shirts, costing more than \$3 per doz. .	\$1 doz. and	
Salt, in bags, barrels, or other pack-				25 p c	35 p c
ages (packages same duty as if im-			Shirts, n.e.s.	35 p c	same
ported empty)	7½ c 100 lbs	same	Shoemakers' pitch and wax	20 p c	same
Saltpetre	free	same	Show cases	35 p c	same
Salt cake (sulphate of soda), crude ...	free	same	Show cards, framed.	30 p c	35 p c
Sand	free	same	Silex or crystallized quartz.	free	same
Sand, colored.	20 p c	same	Silk, clothing	32½ p c	35 p c
Sand cloth	20 p c	35 p c	Silk hosiery	10c. doz. prs.	
Sand (iron) or globules for polishing				and 35 p c	35 p c
granite	free	same	Silk, raw, or as reeled from the cocoon,		
Sand, glass, flint and emery paper. .	20 p c	35 p c	not being doubled, twisted or ad-		
Satchels	30 p c	same	vanced in any way, silk cocoons, and		
Sausage casings, n.e.s.	20 p c	same	silk waste.	free	same
			Silk twist, sewing and embroidery silk.	25 p c	same

	Old.	New.		Old.	New.
Silk, in the gum or spun, not more advanced than singles, tram, and thrown organzine, not colored.	15 p c	same	hydrated oxide of ethyl, or spirits of wine; gin of all kinds, n.e.s.; rum, whiskey, all spirituous or alcoholic liquors, n.o.p.	\$2.25 gal.	\$2.40 gal.
Silk velvets, and all manufactures of silk or of which silk is the component part of chief value, n.e.s., except church vestments	30 p c	same	Amyl alcohol or fusil oil, or any substance known as potato spirit or potato oil.	\$2.25 gal.	\$2.40 gal.
Silver leaf	25 p c	same	Methyl alcohol, wood alcohol, wood naphtha, pyroxylic spirit, or any substance known as wood spirit or methylated spirit; absinthe, arrack or palm spirit, brandy, including artificial brandy and imitations of brandy; cordials and liqueurs of all kinds, n.e.s.; mescal, pulque, rum shrub, schiedam and other schapps, tafia, angostura, and similar alcoholic bitters or beverages	\$2.25 gal.	\$2.40 gal.
Silver-plated ware	30 p c	same	Spirits and strong waters of any kind mixed with any ingredient or ingredients and being or known or designated as anodynes, elixirs, essences, extracts, lotions, tinctures, or medicines, n.e.s.	\$2.25 gallon and 30 p c	\$2.40 and 30 p c
Skins, bird, and skins of animals not native to Canada for taxidermic purposes, not further manufactured than prepared for preservation	free	same	Alcoholic perfumes and perfumed spirits, bay rum, cologne and lavender waters, hair, tooth and skin washes and other toilet preparations containing spirits of any kind, when in bottles or flasks weighing not more than 4 oz. each	50 p c	same
Slates, roofing	30 p c	25 p c	When in bottles, flasks or other packages weighing more than 4 oz. each	\$2.25 gal. and 40 p c	\$2.40 and 40 p c
Slates, school and writing	30 p c	25 p c	Nitrous ether, sweet spirits of nitre and aromatic spirits of ammonia.	\$2.25 gal. and 30 p c	\$2.40 gal. and 30 p c
Slate mantels	30 p c	same	Vermouth, containing not more than 30 per cent., and ginger wine, containing not more than 26 per cent. of proof spirits,	80c. gal.	90c. gal.
Slate pencils	25 p c	same	If containing more than these percentages, respectively, of proof spirits.	\$2.25 gal.	\$2.40 gal.
Slates and manufactures of, n.e.s.	30 p c	same	Sponges	20 p c	same
Sledges	30 p c	same	Spurs and stiltis, used in the manufacture of earthenware	free	same
Sleighs	30 p c	35 p c	Square reeds and rawhide centres, textile leather or rubber heads, thumbs and tips, and steel, iron or nickel caps for whip ends, when imported by whip manufacturers for use in the mfr. of whips in their own factories.	free	same
Soap, common or laundry, not perfumed	1c. per lb.	same	Starch, including farina, corn starch or flour, and all preparations having the qualities of starch. (The weight of the package to be included in the weight for duty)	1 1/2 c. lb.	same
Soap, castile, mottled or white	2c. lb.	same	Stones, burr, in blocks, rough or unmanufactured and not bound up or prepared for binding into millstone.	free	same
Soap, n.e.s., pearline and other soap, powders, pumice, silver and mineral soaps, sapolio and other like articles	35 p c	same	Stone, rough freestone, flag stones, granite, sandstone, and all building stone, except marble, from the quarry, not hammered or chiselled	20 p c	15 p c
Socks or stockings of cotton, wool, worsted, the hair of the alpaca goat or other like animal	10c. doz. prs. and 35 p c	35 p c	Stone, granite, flagstones and free-stones, dressed, all other building stone dressed, except marble, and all manner of stone, n.e.s.	30 p c	20 p c
Soda ash caustic in drums; silicate in crystals or in solution; bichromate nitrate or cubic nitre, sal soda, sulphate of soda, arseniate, binarseniate, bisulphate, chlorate, chloride and stannate of soda	free	same	Stone, lithographic, not engraved	20 p c	same
Soda, bicarbonate of	20 p c	same	Stone, grindstones, not mounted and not less than 36 inches in diameter ..	\$1.75 ton.	15 p c
Soda, nitrite of	free	same	Straw and manufactures of, n.e.s.	20 p c	same
Solder	30 p c	same	Straw boards in sheets or rolls, plain or tarred	30c. 100 lbs.	25 p c
Soups	25 p c	same			
Soy	35 p c	same			
Spectacles and eyeglasses	30 p c	same			
Spectacles and eyeglass frames, parts of	20 p c	same			
Spelter, in blocks and pigs	free	same			
Spermaceti	20 p c	same			
Spices of all kinds, except mace and nutmegs, unground	12 1/2 p c	same			
Spices, ground	25 p c	same			
Spices, mace and nutmegs	25 p c	same			
Spirituous or alcoholic liquors distilled from any material, or containing, compounded from or with distilled spirits of any kind and any mixture thereof with water, for every gallon thereof of the strength of proof, and when of a greater strength than that of proof at the same rate on the increased quantity that there would be if the liquors were reduced to the strength of proof. When the liquors are of less strength than that of proof, the duty shall be at the rate herein provided, but computed on a reduced quantity of the liquors in proportion to the lesser degree of strength; provided, however, that no reduction in quantity shall be computed or made on any liquors below the strength of 15 per cent. under proof, but all such liquors shall be computed as of the strength of 15 per cent. under proof as follows, viz.:					
Ethyl alcohol or the substance commonly known as alcohol,					

	Old.	New.		Old.	New.
Sugar of milk	20 p c	same	Tinware, stamped, japanned ware and galvanized iron ware	25 p c	same
Sugar of milk tablets, not further sweetened	20 p c	same	Tinware, and manufactures of tin, n.e.s.	25 p c	same
Sugar, glucose or grape sugar	1 ¼ c. lb.	¾ c. lb.	Tobacco, cigars and cigarettes	\$2 per lb. and 25 p c	\$3 lb. 25 p c
Sugar, all above No. 16, Dutch standard in color, and all refined sugars of whatever kinds, grades or standards, the usual packages in which they are imported to be free	1 14-100c. lb.	1c. lb.	Tobacco, manufactured, and snuff	35c. per lb. and 12 ½ p c	50c. lb.
Sugar, all under 16 Dutch standard ..	½ c. lb.	same	Tobacco, cut	45c. per lb. and 12 ½ p c	55c. lb.
Sugar candy, brown or white, and confectionery, including sweetened gums, candied peels, and pop corn	½ c. lb. and 35 p c	same	Tobacco pipes of all kinds, pipe mounts, cigar and cigarette holders and cases for the same	35 p c	same
Sulphate of quinine (in powder)	free	same	Tools, mechanics' and edge tools, n.e.s.	35 p c	30 p c
Sulphate of iron (copperas) and sulphate of copper (blue vitriol)	free	same	Towels of every description	25 p c	30 p c
Sulphur and brimstone, in roll or flour.	free	same	Towel racks and rollers	30 p c	same
Sulphuric ether	5c. lb.	25 p c	Toys, all kinds and materials	35 p c	same
Surgical belts or trusses and suspensory badges of all kinds	25 p c	20 p c	Tracing cloth	30 p c, but not less than 4c. sq. yard	30 p c
Surgical and dental instruments and surgical needles	25 p c	10 p c	Travelers' baggage, under regulations to be prescribed by the Minister of Customs	free	same
Syrup, glucose syrup and corn syrup, or any syrup containing any admixture thereof	1 ¼ c. lb.	¾ c. lb.	Trees, n.e.s.	free	same
Tags , tin, for plug tobacco	25 p c	same	Tree nails	free	same
Tagging, metal, plain, japanned or coated, in coils, not over 1 ½ inches in width, when imported by manufacturers of shoe and corset laces, for use in their own factories	free	same	Tripoli	20 p c	same
Tails, undressed	free	same	Trunks	30 p c	same
Tape measures	25 p c	same	Trunk trimmings	30 p c	same
Tapioca	20 p c	25 p c	Turmeric	free	same
Taraxicum root	free	same	Turpentine, raw or crude	free	same
Tarpaulin, cotton, plain or coated with oil, paint, tar or other composition ..	30 p c	same	Turpentine, spirits of	5 p c	same
Tar, pine, in packages of not less than 15 gallons each	free	same	Turtles	free	same
Tassels	30 p c	35 p c	Twine for harvest binders, of hemp jute, manilla or sisal, and of manilla and sisal mixed	12 ½ p c	10 p c until Jan. '98 then free
Teas and green coffees, imported direct from the country of growth and production	free	same	Type, for printing	20 p c	same
This item shall include teas and coffees purchased in bond in any country where tea and coffee are subject to Customs duty, provided there be satisfactory proof that the tea or coffee so purchased in bond is such as might be entered for home consumption in the country where the same is purchased.			Type metal	10 p c	same
Tea and green coffee, n.e.s.	10 p c	same	Type writers	27 ½ p c	25 p c
Teasels	free	same	Type-making accessories for printing presses	30 p c	10 p c
Telephones and telegraph instruments: telegraph, telephone and electric light cables; electric and galvanic batteries, electric motors, generators, dynamos, sockets and electric apparatus, n.e.s.	25 p c	same	Typewriters, tablets with movable figures, geographical map and musical instruments, when imported by and for the use of schools for the blind, and being and remaining the sole property of the governing bodies of said schools, and not of private individuals, the above particulars to be verified by special affidavit on each entry when presented	free	same
Telescopes	25 p c	same	Ultramarine Blue , dry or in pulp	free	same
Tents and awnings	25 p c	same	Umbrellas, parasols and sunshades of all kinds and materials	35 p c	same
Terra japonica, gambier or cutch	free	same	Umbrella and parasol, steel and iron or brass ribs, runners, rings, caps, notches, tin caps and ferrules, for the use of manufacturers of umbrellas	free	same
Terra cotta panels, mouldings and cornices	30 p c	same	Umbrella, parasol and sunshade sticks or handles, in the rough, not further manufactured than cut into suitable lengths	free	same
Terraline, vases and plaques	35 p c	same	Unenumerated articles	20 p c	same
Thermometers, all kinds	25 p c	same	Vaccine and ivory vaccine points	free	same
Terra alba	20 p c	same	Valerian root	free	same
Thimbles, steel	27 ½ p c	25 p c	Varnishes, n.e.s.	20c. gal. and 20 p c	same
Thimbles, brass	30 p c	same	Varnish, black and bright for ship use.	free	same
Thread, linen, n.e.s.	20 p c	35 p c	Varnish and colors ground in spirits ..	\$1.12 ½ gal.	same
Tin, in blocks, pigs, bars and sheets, plates and tinfoil and tin strip waste.	free	same	Vaseline, and all similar preparations of petroleum for toilet, medicinal or other purposes	35 p c	same
Tin, crystals and tea lead	free	same	Vases, glass, plain or fancy	20 p c	same
Tin plates in sheets or strips, decorated	25 p c	same	Vases, china and porcelain	30 p c	same
Tin whisk holders, lacquered	25 p c	same	Vases, earthenware	30 p c	same
Tinned iron kettle ears	27 ½ p c	25 p c	Vegetables, when fresh or dry salted, n.e.s.	25 p c	same
			Vegetables, tomatoes, fresh	20c. bush. and 10 p c	same

	Old.	New.		Old.	New.
Vegetables, sweet potatoes and yams..	10c. bush.	same	In bottles containing not more than a pint and more than ½ pint...	\$1.65 dozen	same
Vegetables, tomatoes and other vegetables, including corn and baked beans, in cans or other packages, n.e.s. The weight of the can or other package to be included in the weight for duty.....	1 ½ c. lb.	same	In bottles containing ½ pint each or less.....	82c. doz.	same
Vegetables, onions, sets for planting, not fit for table use.....	20 p c	same	In bottles containing more than 1 quart each shall pay, in addition to \$3.30 per dozen bottles, at the rate of \$1.65 per gallon on the quantity in excess of 1 quart per bottle, the quarts and pints in each case being old wine measure; in addition to the above specific duty, there shall be an ad valorem duty of.....	30 p c	same
Velveteens and cotton velvets and cotton plush.....	30 p c	30 p c	Wire cloth of brass or copper.....	20 p c	25 p c
Veneers of wood, not over 3-32 of an inch in thickness .....	.....	7 ½ p c	Wire cloth, iron or steel.....	30 p c	same
Veneers of wood, not over 1-16 of an inch thick, made from woods native to Canada.....	10 p c	.....	Wire, of all metals and kinds, n.e.s. ..	25 p c	20 p c
Velocipedes.....	30 p c	same	Wire ferrules, iron or steel.....	27 ½ p c	25 p c
Veneers, ivory, sawn only.....	free	same	Brass	30 p c	same
Veneers, ivory, other, n.e.s.....	20 p c	same	Wire phosphor, bronze blocks, sheets and wire.....	10 p c	same
Vente, fireclay chimney linings, glazed or sunglazed.....	35 p c	same	Wire, covered with cotton, linen, silk or other material	30 p c	same
Verdigris or sub-acetate of copper (dry)	free		Wire rigging for ships and vessels....	free	same
Vinegar, of any strength not exceeding the strength of proof; for each deg. of strength in excess of the strength of proof an additional duty of 2c. ..	15c. imp. gal.	same	Wire, barbed wire fencing	¾ c. lb.	(see above)
Vices	35 p c	30 p c	Wire, buckhorn and strip fencing	½ c. lb.	15 p c
Wagon and cart brushes.....	35 p c	25 p c	Wire, brass and copper wire, twisted, when imported by manufacturers of boots and shoes for use in their own factories.....	free	same
Wall decorations, Lincrusta Walton..	1 ½ c. roll of 8 yds. and		Wire, crucible cast steel	free	same
	25 p c	35 p c	Wire, of iron or steel, Nos. 13 and 14 gauge, flattened and corrugated, used with the wire grip machine for the manufacture of boots, shoes and leather belting, imported by manufacturers of such articles to be used for these purposes only in their own factories	free	same
Walking sticks and canes of all kinds, n.e.s.	25 p c	30 p c	Wire rods, brass copper, iron or steel, rolled round, under ¾ in. in diameter, when imported by wire manufacturers making wire for use in their own factories.....	free	same
Washing crystal	20 p c	same	Wire, soft drawn Bessemer spring steel wire of Nos. 10, 12 and 13 gauge, and Homo spring steel wire of Nos. 11 and 12 gauge respectively, when imported by manufacturers of wire mattresses, to be used in their own factories	free	same
Watches.....	25 p c	same	Wire, flat strip and flat steel, when imported into Canada by manufacturers of buckthorns, plain strip or other fencing, and safety barb wire fencing, for use in their own factories in the manufacture thereof.....	free	same
Watch cases.....	35 p c	30 p c	Wire screw hooks and eyes, iron....	27 ½ p c	.....
Watch, composition metal for the manufacture of filled gold watch cases	10 p c	same	Wire, platinum sheets; retorts, pans, condensers, tubing and pipe made of platinum, imported by manufacturers of sulphuric acid for use in the manufacture or concentration of sulphuric acid	free	same
Watch keys, of brass.....	30 p c	25 p c	Wire nails	1c. lb.	3-5c. lb.
Watch keys, of steel.....	27 ½ p c	25 p c	Wire, brass rods cut to special length.	30 p c	same
Watch actions or movements.....	10 p c	same	Wire rope, of iron and steel, n.o.p....	25 p c	same
Water meters.....	30 p c	same	Wire work, and manufactures of iron wire, n.e.s.....	27 ½ p c	20 p c
Wax, paraffine, and animal stearine of all kinds.....	2c. lb.	30 p c	Wood, cordwood	20 p c	same
Wax, manufactures of, other.....	20 p c	same	Wire window screens	30 p c	same
Webbing, elastic	20 p c	same	Wood furniture, house, cabinet or office, including bedsteads, hair, spring and other mattresses, bolsters and pillows, and picture frames....	30 p c	same
Webbing, non-elastic	20 p c	same	Wood caskets and coffins.....	25 p c	same
Whalebone, unmanufactured.....	free	same	Wood for fuel.....	free	same
Whalebone, manufactures of, n.e.s.	20 p c	same	Wooden mallets	35 p c	30 p c
Wheat	15c. bush.	12c. bush.			
Wheat flour	75c. bbl.	60c. bbl.			
Wheels, parts of, hubs and spokes, in the rough	free	same			
Wheelbarrows and other like articles..	30 p c	same			
Whips of all kinds, including thongs and lashes.....	35 p c	same			
Whiting or whitening, gilders' whiting and Paris white.....	free	same			
Willow for basket makers.....	free	same			
Willow and osier works, n.e.s.	25 p c	same			
Window curtain poles	30 p c	same			
Window blind rollers, finished or mounted	35 p c	same			
Window shades, made of paper.....	35 p c	same			
Wines of all kinds, except sparkling wines, including orange, lemon, strawberry, raspberry, elder and currant, containing 26 per cent. or less of spirits of strength of proof, imported in wood or bottles.....	25c. imp. gal. and 30 p c	same			
Wines of every degree above 26 up to 40 p. c., 3c. more for each degree of strength and	30 p c	same			
Champagne and all other sparkling wines, in bottles containing each not more than 1 quart and more than 1 pint.	\$3.30 dozen bottles	same			

	Old.	New.		Old.	New.
Wood pumps.....	30 p c	25 p c	Wool noils.....	free	same
Wood hubs, spokes, felloes and parts of wheels, rough hewn or sawn only	free	same	Woolen shawls and shawls of all kinds	25 p c	30 p c
Wood, felloes of hickory, rough sawn to shape only, or rough sawn and bent to shape, not planed, smoothed or otherwise manufactured.....	free	same	Woolen socks and stockings.....	10c. doz. prs. and 35 p c	35 p c
Wood, shingles.....	20 p c	free	Woolen waste, fit only for the manufacture of paper.....	free	same
Wood, pails, tubs and churns, brooms, washboards, pounders and rolling pins.....	20 p c	same	Xyolite , or celluloid, in sheets, lumps or blocks, in the rough, n.e.s.....	free	same
Wood pulp.....	free	25 p c	Yarns , cotton and cotton warps, dyed or undyed, n.e.s.....	25 p c	same
Wood, manufactures of, n.e.s.....	25 p c	same	Yarns, composed wholly or in part of wool, worsted, the hair of the Alpaca goat, or other like animal, costing 30c. lb. and under.....	5c. lb. and 20 p c	20 p c
Wood, lumber and timber, manufactured.....	20 p c	25 p c	Yarns, woolen and worsted, n.e.s.....	30 p c	same
Wood, lumber and timber, planks and boards, amaranth, boxwood, cocoboral, rosewood, cherry, walnut, chestnut, gumwood, mahogany, pitch pine, redwood, sandalwood, sycamore, Spanish cedar, oak, hickory, whitewood, African teak, black heart, ebony, lignumvitæ, red cedar, and satinwood and white ash, when not otherwise manufactured than rough sawn or split; or creosoted, vulcanized or treated by any other preserving process; and the wood of the persimmon and dogwood trees, hickory billets and hickory lumber sawn to shape for spokes of wheels, but not further manufactured; and hickory spokes, rough, turned but not tenoned, mitred, throated, faced, sized, cut to length, round tenoned or polished.....	free	same	Yarn, jute, flax or hemp, plain, dyed or colored, when imported by the manufacturers of carpets, rugs and mats, and of jute webbing or jute cloth, and twines for use in their factories.....	free	same
Wood, sawed boards, planks and deals, planed or dressed on one or both sides, when the edges thereof are pointed or tongued and grooved. Provided that such lumber may be imported free of duty upon proclamation of the Governor-in-Council, which may be issued whenever it appears to his satisfaction that similar lumber from Canada may be imported into the U.S. free of duty.	25 p c	same	Yarn, spun from the hair of the Alpaca or Angora goat, when imported by manufacturers of braids, for use exclusively in their factories in the manufacture of such braids only, under such regulations as may be adopted by the Controller of Customs	free	same
Wood, logs, and round unmanufactured timber.....	free	same	Yarns, cotton, No. 40 and finer.....	free	same
Wool, and hair of the alpaca goat, camel, unmanufactured, and other like animals, not further prepared than washed, n.e.s.....	free	same	Yarn of wool or worsted, when genapped, dyed and finished, and imported by the manufs. of braids, cords, tassels and fringes, for use in their factories in the manufacture of such articles only.....	free	same
Wool and woolen, manufactures of, composed wholly or in part of wool, worsted, hair of alpaca goat, or other like animals, viz.: Blankets and flannels of every description, cloths, doeskins, cassimeres, tweeds, coatings, overcoatings, felt cloth, n.e.s..	5c. lb. and 25 p c	35 p c	Yarns, mohair.....	free	same
Wool and woollens—All fabrics composed wholly or in part of wool, worsted, hair of alpaca goat, or other like animal, n.e.s.....	30 p c	35 p c	Yeast, compressed yeast, not over fifty pounds weight, the weight of the package to be included in the weight for duty.....	6c. lb.	same
Wool clothing, ready-made, and wearing apparel of every description, composed wholly or in part of wool, worsted, the hair of the alpaca goat or other like animal, n.o.p....	5c. lb. and 30 p c	35 p c	Yeast cakes and baking powders, the weight of the package to be included in the weight of duty.....	6c. lb.	same
Wool knitted goods of every description, including knitted underwear, n.e.s.....	53 p c	same	Yeast, compressed, in bulk or mass of not less than fifty pounds.....	3c. lb.	same
Wool, viz.: Leicester, Cotswold, Lincolnshire, South Down combing wools, or wools known as lustre wools, and other like combing wools, such as are grown in Canada.....	3c. lb.	same	Yellow metal, in bolts, bars and for sheathing.....	free	same
Wool hosiery, shirts, etc.....	35 p c	same	Zinc , chloride, and sulphate of.....	free	same
			Zinc, in blocks, pigs and sheets.....	free	same
			Zinc, seamless drawn tubing.....	free	same
			Zinc, manufactures of, n.e.s.....	25 p c	same
			Zinc dust.....	free	same

SCHEDULE D — RECIPROCAL TARIFF.

On all the products of countries entitled to the benefits of this Reciprocal Tariff, under the provisions of section sixteen, the duties mentioned in Schedule A shall be reduced as follows:

On and after the twenty-third day of April, 1897, until the thirtieth day of June, 1898, inclusive, the reduction shall in every case be one-eighth of the duty mentioned in Schedule A, and the duty to be levied, collected and paid shall be seven-eighths of the duty mentioned in Schedule A.

On and after the first day of July, 1898, the reduction shall in every case be one-fourth of the duty mentioned in Schedule A, and the duty to be levied, collected and paid shall be three-fourths of the duty mentioned in Schedule A.

Provided, however, that these reductions shall not apply to any of the following articles, and that such articles shall in all cases be subject to the duties mentioned in Schedule A, viz.: Wines, malt liquors, spirits, spirituous liquors, liquid medicines and articles containing alcohol; sugar, molasses and syrups of all kinds, the product of the sugar cane or beet root; tobacco, cigars and cigarettes.

Binder Twine

Pure Manila

650 ft. to the lb.



**BLUE RIBBON
BLUE CROWN
STANDARD**

**RED CAP
RED CROWN
WHITE SISAL**

For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.



Consumers
Cordage Co.

MONTREAL . . .

ESTABLISHED 1860.

INCORPORATED 1895.



Steel Enamelled Ware

"CRESCENT," "ROYAL" AND WHITE.

If you want a line of goods that will please your customers, send along your orders for any of the above brands, and you will get Enamelled Ware that will give entire satisfaction.

We are busy filling orders for these goods,
but are always anxious for more business.....



GUARANTEED not to Chip or Burn.

The THOS. DAVIDSON MFG. CO. Limited

MONTREAL

HOW TO TEMPER A SPRING.

IT is not every smith who knows how properly to temper a spring, says an exchange. It is not a hard job to some smiths, but other smiths, professional and amateur, claim that it is. In getting ready to temper a spring one should begin with the forging itself, for if that be not well done no amount of "know how" can make a successful tempering. The forging should be done with low heats and light blows, and the steel should not be hammered while cold, with heavy blows at least. Avoid making hammer marks in the steel when forging, for, although such marks may be worked out, they do not add to the strength or long life of the spring. A good many failures of seemingly perfect springs could doubtless be traced to this little point in the forging. After the spring has been hammered to size spend a little extra time in lightly hammering the steel when it is nearly cold—but don't strike hard. The light hammering will toughen the steel and make a better spring. The outside surface, or "skin," seems better adapted to spring work where the surface is hammered up instead of being filed or ground. After the hammering is done, polish the spring with a bit of emery paper. It is best not to put it on an emery wheel, for then the skin above mentioned would be destroyed. Sometimes, however, it is necessary to partly shape the spring by grinding, but let this be done at an early stage of the job, so that the outside skin may be restored as much as possible. When ready for the hardening, there are two ways of doing the heating—either by holding the spring over a clear fire with a small pair of tongs, keeping the spring high up so that it will heat slowly, or by first heating a heavy piece of iron red-hot and then placing the spring on that until the steel is heated.

When the spring is fully and uniformly heated to a light red, plunge into cool, but not ice-cold, water. The amount of twist that is got into the spring by this operation

depends on the manner in which the spring is put into the water. If it be put in so that a flat side touches first, the sudden cooling of that side will cause the spring to be pulled out of shape, and held there by the subsequent cooling of the rest of the spring. If put into the water endwise, or straight, there will be but little distortion of the spring. After hardening, polish the steel with a bit of emery cloth until the metal is bright, clean and white; then put a few drops of oil on a bit of paper, light it, and hold under the spring until every portion of its surface is covered with a thick coating of smoke. Next heat the spring slowly, holding it high up over the forge fire until the smoke is all burned off; but it should go all alike. Don't let one part of the spring get so hot that the smoke is all burned off, while another part is thickly coated. When the smoke has been burned off, lay the spring on the ashes of the forge to cool slowly, and in a few minutes it will be ready for work.

THE STATUS OF ALUMINUM.

A REDUCTION of about £7 per ton has just been made in the price of aluminum, which, although not very substantial, yet is of considerable importance, as aluminum is just now at the point where on a basis of cost it can compete with copper. The price of the metal, in ingots of 98 to 99¾ per cent. purity, is £148 per ton, while the metal in rods has been reduced from £252 per ton to £224. Ingot metal suitable for making castings is quoted at £128 per ton. Taking the price of copper at £49 6s, which is the figure at which it has been quoted on the London metal market this week, the relative cost of the pure aluminum is £44 18s bulk for bulk, which is after all the standard by which metals are generally bought, and it must be remembered that copper is 3.3 times heavier than pure aluminum. The "casting alloy," which simply means aluminum alloyed with varying percentages of either copper, manganese or zinc, may be assumed to be three times lighter than copper, and its price relative to that metal would be about £42.

These figures show that aluminum at the present prices of the two metals is from £4 to £7 per ton cheaper than copper, a result which must indeed be a satisfaction to advocates of the "metal made from clay." This cheapened cost is indeed almost a surprise to those engaged in the manufacture of the metal, and may be ascribed as mainly due to the cheapened cost of making alumina from bauxite; the improvements introduced into the manufacture of electrode carbons, which are a large item of expense; the substitution of water for coal power, as well as a better knowledge of the electrolytic processes attained by those working them.

The fall in the price of aluminum has been truly phenomenal, and the following table shows approximately the prices at which it has been sold since 1856, from which year its manufacture dates:

Year.	Place.	Price per lb.
		£. s. d.
1856 (spring)	Paris	18 10 0
1856 (August)	Paris	5 10 0
1862	Paris	
	Newcastle	2 8 0
1886	Paris	2 9 0
1887	Bremen	1 13 0
1888	London	1 0 0
1889	Pittsburgh	0 8 4
1895	Neuhausen	0 3 0
1897	Pittsburgh	0 1 8
1897	London	0 1 3½

This fall in price has been accompanied by corresponding reduction in the cost of valuable alloys of which aluminum forms an essential part. Aluminum bronze is the most useful of these, and only needs a wider appreciation of its virtues to be very largely used. Its present cost for the 10 per cent bronze, with copper at £49 per ton and aluminum at £150 per ton, is not quite £60 per ton for the materials alone. In addition to this there is, of course, the cost of melting. Twenty years ago aluminum bronze cost 7s a pound.—London Iron and Coal Trades Review.

OFF FOR NEW WESTMINSTER.

Mr. W. C. Perry, who for the past five years has been in the employ of M. & L. Samuel, Benjamin & Co., of Toronto, as salesman, left on Monday last for New Westminster, B.C., where he has secured an engagement with the James A. Cunningham Hardware Co. Prior to his departure his fellow-employees presented him with a solid gold chain, locket and ring. Mr. Perry is a bright and energetic young man with pleasing address, and should do well in business wherever his lot may be cast.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, July 30, 1897.

HARDWARE.

THERE was a fair seasonable business in general hardware during the past week, and values generally are steady. Barbed and plain wire continued quiet, but there was a brisk jobbing movement in wire nails, cut nails, horse nails, horseshoes, screws, bolts, rivets and cordage. Orders for harvest tools also were maintained in fair volume, while sporting goods have widened out to a pretty good volume of trade. Sorting orders for cutlery were considerable, and there was a good business transacted in cement and firebricks.

BARBED WIRE—There has been little activity to report in the barbed wire market. Round lots are quoted at \$2.20 and jobbing quantities \$2.25 f.o.b. Montreal.

PLAIN WIRE—Continues quiet and unchanged, with discounts 30 and 5 off, f.o.b. Montreal for Quebec.

WIRE NAILS—There has been a fair demand for wire nails, the week's volume of trade being quite extensive. We quote \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS—In fair enquiry for small parcels, and prices steady at \$1.85, f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is a fair enquiry for horse nails, with discounts 50 per cent.

HORSESHOES—There is a good enquiry for horseshoes. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—There is a good active trade in screws. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Quiet and unchanged at 12½ per cent.

BOLTS—A good enquiry is maintained for bolts. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—The same remarks apply to rivets. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There has been a good demand for cordage at the advance. We quote: Sisal, 7-16 and upwards, 5½c.; ¾, 6½c.; 5-16 and ¼, 6½c., and 3-16, 7½c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—Business in churns is quiet, with discounts, 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—Values steady, with demand quiet, at \$28 to \$31.50, as to brand.

ICE CREAM FREEZERS—Small sizes, such as 2-quart, continue in good enquiry. We quote on the basis of \$1.30.

HARVEST TOOLS—Orders are still quite extensive for harvesting tools.

SPADES AND SHOVELS—Business quiet with no change to report.

FILES—There is a fair demand for these. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

BUILDING PAPER—A good business was done in this line. We quote: Plain building, 30c.; tarred lining, 40c., and do. roofing, \$1.40.

LEATHER BELTING—Quiet and unchanged. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

HINGES—A fair demand is reported for these. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WIRE CLOTH—There is a steady trade passing in wire cloth.

CUTLERY—Sorting orders for cutlery continue to arrive quite freely.

SPORTING GOODS—Demand in this line has shown material expansion during the week, guns and ammunition being asked for.

SHOT—Has shared in the above activity. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

CEMENT—There has been a better demand for small lots of cement, quite a large volume of business being noted at steady prices. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2 per bbl, ex wharf.

FIREBRICKS—An active trade is doing in bricks at \$16 to \$21 per 1,000, as to brand.

METALS.

Business in metals has been fairly active and a striking feature of the present situation is the current scarcity of many staple lines. Indeed, some are not to be had at all. As a result, prices generally are firmly held.

PIG IRON—There has been a little better feeling in pig iron, business in round lots of Hamilton and Summerlee having transpired at firm prices. We quote: Hamilton, \$15.50 to \$16 for No. 1, and \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrson, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—There has been little change

Preserving Kettles..



FAMOUS
and
IMPERIAL

The great demand for preserving kettles in these wares overtaxed us for a time, but we have caught up, and can now supply all sizes in Imperial ware, and will have a full line in Famous ware for the coming week.

These Wares, being absolutely **FREE FROM POISON** and **THOROUGHLY COATED** on steel, make the best wares to sell, and the best to please your customers.

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST

AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman Sporting Goods Co. 403 St. Paul St.

MONTREAL

in bar iron, values still having an irregular tendency at \$1.35 to \$1.40.

BAND IRON—Quiet and steady at \$1.65.

HOOP IRON—There is nothing to report in this line, prices ruling at \$2.25.

SHEET STEEL—Without change, demand ruling quiet at \$2.35.

SHEET IRON—The heavier gauges of black sheet iron are very difficult to get on spot and values are firm at \$2.25.

GALVANIZED IRON—Stocks of galvanized iron are light, especially of leading brands like "Queen's Head" and "Morewood." We quote values steady at \$4.25 to \$4.30.

TINNED IRON—No change to report from \$5.50 up to 20 gauge.

LEAD PIPE—There is no change in this, and we quote 7 to 7½c., with 30 and 5 off.

PIG LEAD—There has been a firmer feeling in pig lead, and prices are 5c. firmer on the inside, at \$3.40 to \$3.50.

INGOT TIN—Very little is doing in tin, which we quote steady at 16 to 16½c.

INGOT COPPER—There has been no change in copper, which is dull at 12 to 12½c.

SHEET COPPER—Without change, at 14½ to 16c.

CANADA PLATES—Stocks of these are light, while demand is on the increase. Prices are firmly held, therefore, at \$2.25 to \$2.30, and no round lots are obtainable on spot.

TIN PLATES—Steadily held under increasing demand and light stocks. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—The market here continues absolutely bare of terne plates, and prices are firm at \$6.25.

BOILER PLATE—Continues steady at \$1.90 to \$2.

SOLDER—Has sold at 12c. per lb. during the week.

SPELTER—Unchanged at \$1.50 to \$4.75.

ANTIMONY—Quiet at 9½ to 10c.

SCRAP IRON—Car lots are offering at \$12 for No. 1, and \$6 to \$7 for No. 2.

IRON PIPE—Without new feature, while demand is quite active. We quote per 100 feet net: Wrought, ¼ to ¾-inch, \$1.87; ½-inch, \$2.13 to \$2.25; ¾-inch, \$2.63 to \$2.75; 1-inch, \$3.55 to \$3.65; 1¼-inch, \$4.56 to \$4.75; 1½-inch, \$6 to \$6.12½; 2-inch, \$8.12½ to \$8.25; Galvanized, ½-inch, 4c.; ¾-inch, 4¾c.; 1-inch, 6¾c.; 1¼-inch, 10¼c. 1½-inch, 11½c.

PAINTS AND OILS.

Business has held out favorably until now, but shows signs of slackening off. Paris green continues in demand. Linseed oil has assumed greater firmness in response to cable advices of advanced quotations in

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Best Charcoal Rolled Iron

B. B. Axe Horseshoe Iron.

AND FACTORIES
MONTREAL

NOVA SCOTIA STEEL CO.

Limited

NEW GLASCOW, N.S.

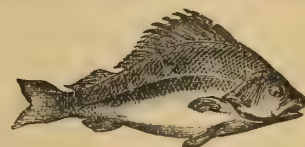
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



Trade Mark.

ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION HAMMOCK MANUFACTURING CO., Paris, Ont.

England. Lead, too, gains in strength, and as present stocks are worked off the disposition to advance prices will strengthen, and one seems inevitable; the only question being how long the makers will consent to give away existing stocks. Naturally, the demand continues to be good. Turpentine remains without change, but has a firmer tendency.

WHITE LEAD—As before, viz., Government standard, \$5; No. 1, \$4.62½; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—Very firm, at 4c. in casks and 4½c. in kegs.

LIQUID PAINTS—Unchanged, with demand good.

SHELLAC—Firm and unchanged at 25c.

PARIS GREEN—Continues active. Drums, 13½c.; packets, 14½c.

LINSEED OIL—More firmly held. For raw we quote 41c.; boiled, 44c.; 5-bbl. lots, 1c. less.

TURPENTINE—Steady at 42c. in single bbls., larger lots, 41c.

VARNISHES—As last reported.

SEAL OIL—Selling steady at 42 to 44c.

COD OIL—Unchanged, at 31c.

NAVAL STORES—Quiet and steady. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c½. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

The glass market has been quite active and firm at the advance. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

The ashes market is steady and unchanged. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

Without change, business ruling quiet. We quote as follows: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

The hide market is strong at 8c. for No. 1, 7c. for No. 2, and 6c. for No. 3.

PETROLEUM.

There is only a quiet business in petroleum. We quote as follows: Canadian,

in car lots, 13½c.; smaller quantities, 14½c.; American prime white, car lots, 17c.; smaller 18c.; water white, car lots, 18½c.; smaller, 19½c.; Pratt's astral, car lots, 20½c., and smaller, 21½c.

COAL.

Rules steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Pig lead has been marked up 5c. on the inside price this week, to \$3.40 per 100 lbs.

Cables from England state that linseed oil has assumed greater firmness with higher prices.

Arrivals of cement during the week were 1,650 bbls. from England and 7,785 from Belgium. Over 1,500 bbls. of the latter have been placed in Ontario.

The last large lot of terne plates available on this market was closed out to a jobber this week, and now the market is absolutely bare of these goods.

ONTARIO MARKETS.

TORONTO, July 30, 1897.

HARDWARE.

WHILE the volume of business is, perhaps, not as large as it was a week ago, there is still a nice trade doing. One of the features is a perceptible falling off in the demand for harvest tools. In fence wire there is naturally little or nothing doing. A little better enquiry is to be noted for wire nails. Cut nails are quiet. Horse nails are going out nicely, but horse-shoes are quiet. Screws and bolts are both in good demand. An increasing demand is to be noted for tinned and coppered rivets. Building paper is in rather better demand. In such seasonable lines as screen doors and windows, granite ware, hinges, etc., a nice trade is being done. About the only change in prices worthy of note is an advance of ¼c. per lb. in the price of sisal rope. Manilla rope is unchanged.

BARB WIRE—There is practically nothing doing. We quote: \$2.20 f.o.b. Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—Dull. Discounts, 30 to 35 per cent. off the list. Terms, 4 months, or 3 per cent. off 30 days.

WIRE NAILS—Trade is about the same as last week, but enquiries are coming in more freely. We quote base price at \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c, in less than carload lots.

CUT NAILS—Are quiet. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Are still going out nicely. Discount, 50 per cent.

HORSESHOES—The tendency is towards a decreased trade. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—These are going out freely. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Business is quiet. Discounts are 12½ per cent.

BOLTS—The demand keeps brisk. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ⅜ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—Are in strong demand. For tinned and coppered an increasing demand is noted. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Nor-

Binder Twine.

HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

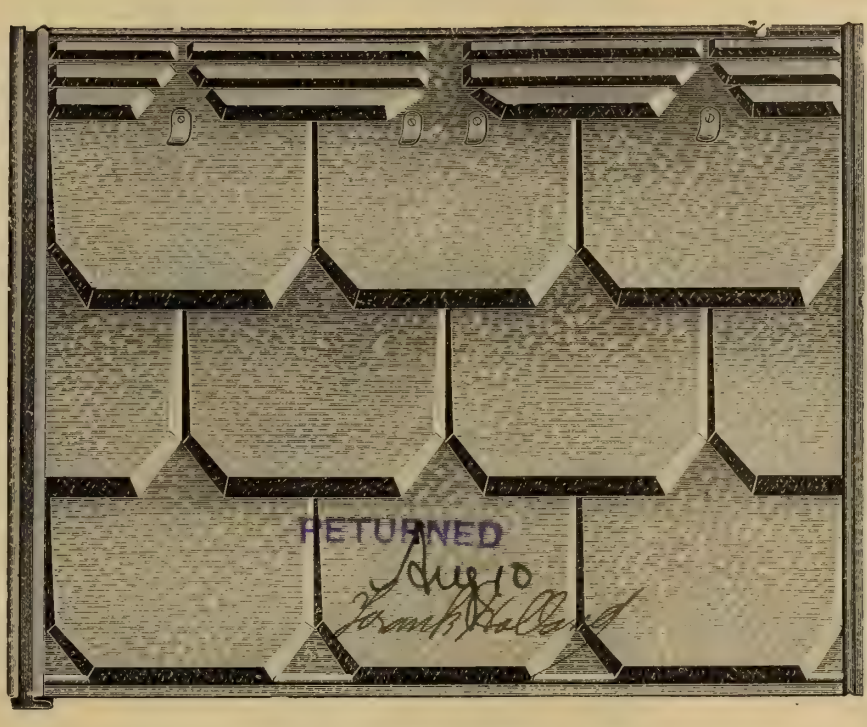
PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

The "Eastlake" Patent Shingle

The only original shingle fastened with a cleat and having a telescopic side lock and concealed water gutter.

Beware of Cheap Imitations.



SHOWS ONE SHINGLE.

The Eastlake Shingles are made from Galvanized or . . . Painted Steel of the

Finest Quality Only.

IMPORTANT INFORMATION

When you purchase a bushel of wheat you expect to get 60 lbs., no matter what grade it is, because that is the standard weight fixed by law. There is no law saying what metallic shingles shall weigh, and the only safe rule is to demand from manufacturers of these goods a list of weights, and see that goods you buy fully come up to this.

If one maker sells you goods guaranteed to weigh 80 lbs. at \$3.20 per square, that is 4c. per lb.; if some one else offers you goods claimed to be "just the same" at \$3.00 per square, his goods may only weigh 70 lbs., and this at the same rate (4c. a lb.) should only make the price \$2.80 per square. Thus the shingles claimed to be "just the same" are 20 cents per square higher than the guaranteed goods, made by an honest maker, out of honest materials, by honest workmen.

MORAL: Deal only with honest, reliable makers, who have some reputation and capital at stake.

We believe that constant attempts are being made to deceive the public who do not happen to be judges of the various roofing and siding plates made by different makers, and we therefore wish to point out to you that the **APPROXIMATE AVERAGE WEIGHTS** of the goods made by us are as follows, **EXCLUSIVE OF THE PACKAGES:**—

GALVANIZED "EASTLAKE" SHINGLES.

No. 1 grade, 105 lbs. per square.
No. 2 " 94 " "
No. 3 " 82 " "

PAINTED "EASTLAKE" SHINGLES.

No. 1 grade, 93 lbs. per square.
No. 2 " 83 " "
No. 3 " 70 " "

THE BEST IS THE CHEAPEST

BRICK OR MANITOBA SIDING PLATE.

No. 1 grade, 77 lbs. per square.
No. 2 " 68 " "
No. 3 " 57 " "

THE BEST IS THE CHEAPEST

All the Above Weights are Exclusive of the Packages.

We do not guarantee that all sheets are of exactly the same thickness, as it is impossible to supply all sheets exactly alike; the above weights are, however, the approximate average weight per square, so that you see exactly what we are offering you, **QUALITY, WEIGHT AND SUPERIOR CONSTRUCTION** being our first consideration. We do not aim at selling the lowest priced goods in the market, but do aim at selling the **BEST**.

Kindly take the above facts into your consideration.

We are the original makers of metallic goods in Canada, and make and sell more than all others combined.

If you want to know why, write us and we will tell you.

The Metallic Roofing Co. of Canada, Limited

Cor. King and Dufferin Sts.

TORONTO, ONT.

way iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Demand is active. Discounts are 17½ per cent.

ROPE—Sisal has been advanced ¼c. per lb., the basis now being 5½c. In manilla no change has been made. We quote as follows: Sisal, 7-16 in. and larger, 5½c.; ¾ in., 5¾c.; ¼ and 5-16 in., 6½c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8½c.; 3-16 in., 8½c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Business is quiet. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Some of the houses are again importing wringers from the United States, and they are being offered at low figures. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—This is the first week during which there has been really any perceptible falling off in the demand for harvest tools. At the same time, however, the demand for cradles exceeds the supply. Discount, 60 and 10 per cent.

SPADES AND SHOVELS—Trade is merely steady. Discount, 45 per cent.

BUILDING PAPER—A slight improvement in the demand is to be noted. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—The increased business noted last week appears to have been maintained. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

WARE—Both tinware and graniteware have been moving freely during the week.

HINGES—A good business is being done. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35.

CUTLERY—A fair quantity of pocket and table cutlery has been moving during the week. A fairly good fall trade is anticipated in cutlery.

SPORTING GOODS—There has been some movement in guns and rifles during the week. Ammunition is beginning to go out well.

SCREEN DOORS AND WINDOWS—The demand during the past week has fallen off and back orders are now pretty well filled.

POULTRY NETTING—Quiet and featureless. Discount, 67½ per cent.

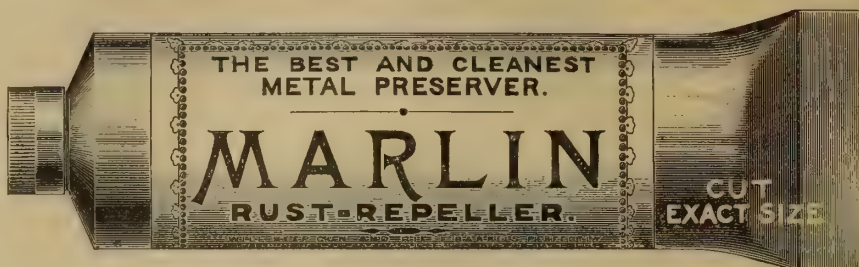
GREEN WIRE CLOTH—Trade is steady. We quote \$1.35 per 100 square feet.

GARDEN HOSE—A fair quantity is going out. We quote: Standard brands, 72½

STANDARD of
AMERICA
for
30 Years



**NICHOLSON
FILE CO.**
Providence, R.I., U.S.A.
Largest Producers in the World.



Guaranteed to be the Best Preservative of Metals.

Not Vaseline. Will retain its form in any climate. Not affected by heat or cold. Will NOT grow RANCID. Least required to coat work thoroughly. Use it to protect your tools. Largest Tube and Best Quality. A Superior Lubricant for Bicycle Chains and Metals. Write regarding this or the best Repeating Rifles to

THE MARLIN FIRE ARMS CO., New Haven, Conn., U.S.A.



To Whet a Scythe...

properly requires a good
Scythe Stone.

**Pike's BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively **Scythe Stones**
the best on earth.

Pike's Lily White Washita OIL-STONE
has no equal for mechanics' tools.
WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—During the last week cement has not been in as active demand as it was, owing doubtless to the unsettled weather. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

PIG IRON—The situation is much as before. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75 for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—There is not a great deal doing. We quote base price at \$1.40 in carload lots and \$1.50 in smaller quantities.

HOOP AND BAND IRON—Business is dull. We quote \$2.25 per 100 lbs.

SHEET STEEL—Trade is good, both in the way of import and from stock. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Has also been moving freely. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Further activity has developed, and orders are larger than a week ago. We quote: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅛ to ¼c. per lb. higher than figures named.

TINNED IRON—There is nothing new to note. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—Trade is steady. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—The demand is fair. Discount, 60 and 10 per cent.

PIG LEAD—A few good orders have been received, but in general trade is quiet. We quote ton lots at $3\frac{1}{2}$ c. per lb., and in smaller quantities at $3\frac{3}{4}$ c. per lb.

INGOT TIN—Trade is quiet. We still quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c.

SHEATHING COPPER, ETC.—Sheathing copper is inclined to be quiet. We quote : as follows : Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity ; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Has been quiet during the past week. We quote per 100 feet net : Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$1.87; $\frac{1}{2}$ inch, \$2.10; $\frac{3}{4}$ inch, \$2.45 to \$2.50; 1 inch, \$3.40; $1\frac{1}{4}$ inch, \$4.50; $1\frac{1}{2}$ inch, \$5.87 to \$6; 2 inch, \$7.87 to \$8; galvanized, $\frac{1}{2}$ inch, 4c.; $\frac{3}{4}$ inch, $4\frac{3}{4}$ c.; 1 inch, $6\frac{3}{4}$ c.; $1\frac{1}{4}$ inch, $10\frac{1}{4}$ c.; $1\frac{1}{2}$ inch, $11\frac{1}{2}$ c.

RANGE BOILERS—Business is moderate. We quote : Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Shipments from stock are increasing slightly and orders for import are coming in freely. We quote : Half-polished, 52 sheets, \$2.50; and all-bright, \$3.

TIN PLATES—Trade is steady, but without any special feature. We quote as follows : Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Business is much as before. We quote : $\frac{1}{4}$ in., $4\frac{1}{2}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Business is steady. We quote : Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Trade is quiet. We quote : I C, \$6.25 to \$6.50; I X, \$8.

SOLDER—Trade is still fair. We quote : Standard, $10\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Business is quiet. We quote : Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

OLD MATERIAL.

There is not likely to be any improvement in the iron trade before the fall demand comes on. Since the American tariff went into force and imposed a duty of 10c. a pound on woolen rags, no more of these goods have been sent into the States. Dealers are now looking for other markets, and it is probable that Great Britain will get the bulk of the Canadian output. The prices of the finer metals in England and the United States are unsteady; sharp advances and firm prices being in order all year. We quote as follows : Agricultural scrap, 40c. per cwt.; machinery

cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb.; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

Although the trade is not large, the business in glass continues to be a main feature in the hardware trade. Double diamond and star are moving out rather freely, although not so lively as a week ago. Dealers are now engaged in filling up stocks to be ready for the fall trade. Prices are firm at the figures quoted. We quote window glass : First break in 50-foot boxes, \$1.20 to \$1.25, and in 100-foot boxes, \$2.30 to \$2.40, Toronto, Hamilton and London.

PAINTS AND OILS.

Business is quiet, although not more so than might be expected. Whatever demand there is, is general. The demand for paris green has materially decreased, although it is expected that rush orders will be coming forward in a few days when the warm weather again arrives. Turpentine has advanced $1\frac{1}{2}$ c. in the south, but large stocks and competition will likely keep the price down in Toronto for a time.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77 $\frac{1}{2}$; No. 2, \$4.40; No. 3, \$4.02 $\frac{1}{2}$; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—\$1.90 per barrel.

CASTOR OIL—In cases, 9c. per lb. and 10c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote : Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12 $\frac{1}{2}$ -lb. tins, 8 in case, \$2.45.

PARIS GREEN—Kegs, 13c.; drums, $13\frac{1}{2}$ c.; 1-lb. cartoons, 14c.; $\frac{1}{2}$ -lb. packages, 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed) : Raw, 1 to 4 barrels, 42 to 43c.; 5 to 9 barrels, 42c.; Boiled, 1 to 4 barrels, 45 to 46c.; 5 to 9 barrels, 45c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 41 to 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. There has been some cutting in turpentine revealed.

HIDES, SKINS AND WOOL.

HIDES—Trade is quite brisk. Cowhides : Dealers pay $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3. Steerhides : 60 lbs. and up, $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3.

CALFSKINS—Trade is brisk and prices are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote : Lambskins, 50c.; pelts, 30c.

WOOL—Trade continues about the same as it was last week. Buyers are paying 19 to 20c.

PETROLEUM, ETC.

The time is drawing near for the orders for fall stocks in oils to come in. The trade in lubricating oil is fully up to the average. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, $14\frac{1}{2}$ c.; carbon, safety, $16\frac{1}{2}$ c.; Canadian water white, 17c.; American water white, $17\frac{1}{2}$ c.; Pratt's astral, 17c. in bulk.

COAL.

Trade is quiet, and dealers are busy laying in fall and winter supplies. Anthracite is quoted at Buffalo and bridges : Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Sisal rope is $\frac{1}{4}$ c. per lb. dearer.

M. & L. Samuel, Benjamin & Co. have just opened up a shipment of a full line of

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

Rodgers' cutlery; also Butler's case carvers, etc.

Stewart & Wood are receiving 1,000 boxes of glass next week.

A good many orders for skates are being booked by Toronto jobbers.

The James Robertson Company are offering some special values in brass kettles, having too large a stock on hand.

H. S. Howland, Sons & Co. report a large trade this season for window screens, door screens and door hinges. They have still a sufficient stock to fill orders promptly.

M. & L. Samuel, Benjamin & Co. have decided to handle the shoe, kitchen and other knives manufactured by T. Harrington, Southbridge, Conn. The shoe knives have been well and favorably known among the shoe trade for years, but they have not heretofore been handled by the hardware trade. The quality and finish of the knives are excellent.

WINNIPEG TRADE CHAT.

THE great Industrial Exhibition of 1897 closed yesterday, with an attendance of 18,000 people, and will go on record as one of the most, if not the most, successful exhibition yet given. The early days of last week were marred by torrents of rain that well nigh drove the directors to despair, but when once the weather cleared it seemed endeavoring to make good the past, and Friday, Saturday and Monday were ideal days, not too hot, a pleasant breeze and abundant sunshine. Friday was American day, and some 5,000 of our American cousins paid our city and Fair a visit and went home filled with amazement at the progress of the province, more especially along the lines of stock raising and dairy products. They realized, perhaps for the first time, that it is not always the people who do the most "talkee, talkee" that are doing the best work. The machinery exhibits were very large and well arranged, and showed great enterprise on the part of the many manufacturers represented. Many of the large machines were in operation, thus giving a much better opportunity of studying their merits and demerits. The binder men made a special effort; one firm had forty of their local agents in town, and each one carefully hunted up the men from his particular district and took them round and explained and expatiated on the working of the machines. Not many actual sales were made, but there is no doubt very much business will result from these efforts. In the main building the display of stoves was very fine. J. H. Ashdown displayed a model kitchen and had some women busily engaged in baking biscuits on one of the

famous "Blue Flame" oil stoves. Fresh hot biscuits and good butter proved a very attractive feature of the model kitchen and very many patronized it. In Machinery Hall many articles of improved dairy machinery were shown. Another exhibit which attracted almost universal attention was the mining exhibit. Some most beautiful specimens were displayed and the men in charge were untiring in their efforts to satisfy the curiosity of their numerous visitors.

Trade generally is just where it was last week. Of course, wholesalers have been busy during the week showing visitors through their establishments and laying foundations for future business, but trade is quiet and there is no change in prices.

UNITED STATES MARKET.

NEW YORK, July 30, 1897.

PIG TIN—The drop in silver has had the usual weakening effect on tin, spot prices for carload lots dropping to 13.75c. For lots of five tons, or less, the quotations range 5 to 10 points higher, according to quality. A slightly better demand is reported. Arrivals yesterday were 150 tons, per steamer Massachusetts.

COPPER—While actual business is still considerably restricted in volume, inquiries are being made more freely, with prospects of more activity in the near future. Lake Superior can be purchased at 11 1/8c. for current jobbing lots, but a large order would not easily be filled inside of 11 1/4c. Electrolytic remains unchanged at 11 to 11 1/8c., while 10 3/4c. may still be quoted for casting stock.

PIG LEAD—There is a halt in the recent upward tendency, and, in fact, it is likely that yesterday's quotation of 3.90c. would be shaded to 3.87 1/2c. by most holders.

SPELTER—The market remains quiet and steady at about 4.30c.

ANTIMONY—A fair business is reported at 6 3/4 to 7 1/2c., according to brand.

TIN PLATE—The local market is decidedly quiet, with scarcely enough business to justify any change in previous quotations.

IRON AND STEEL—All departments are reported steady, but with only a light or moderate amount of business passing.

THE MEANING OF "A REMNANT."

A WEARY-LOOKING man stood behind the counter of an American department store the other day, and seemed to regard with an almost affectionate interest the wooden partition that protected him from the surging crowd of women on the other side of the counter. They struggled with one another desperately, and as one receded two or three sprang forward to seize her place in the front row of the group that had gathered there. One woman with a fine stroke squeezed herself into a vacant space against the counter. She picked up a piece of silk, dropped it, and after

having treated half-a-dozen more in the same way, seized a piece that she held in her hand longer than she had any of the others. "Lovely," she said to the clerk. "How much of it is there?" "Five yards" he said mechanically. "Oh, that's too bad," she answered, and it takes six this year for a waist. But I could get some more, I suppose, at the silk counter;" An expression of exceptional fatigue crossed the man's face, and he answered: "A remnant, ma'am, means the last of a piece." "Oh, pshaw!" was the woman's answer, as she threw the silk down and began to fumble again among the other pieces. "How much in this piece?" called out a woman next to her as she held up a blue and white check. "Is there a waist pattern?" "Only four yards in that, ma'am," the salesman answered. "But couldn't I buy some more at the silk——" "A remnant means the last of a piece, ma'am," answered the clerk, and another piece of silk dropped back on the counter. The women swarmed around the counter, picked over the silks, and some bought. They were talking, and there were murmurs of admiration or disapproval from the disturbed group. But there was one continuous, dominant tone in the talk, and that was the expressionless, invariable voice of the salesman repeating the words, "A remnant means the last of a piece, ma'am."

Hardware Partnership Wanted

In solid business, by Hardware man of ability, and some capital. ADDRESS,

S.G., care of Hardware and Metal,
26 West Front St., Toronto

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Barrister, Solicitor, Notary, Etc.

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Cable "LeVesconte" Toronto.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

NOW READY

Hardware Directory

OF THE

Wholesale and Retail Hardware Dealers
in the United States and
Canada, with

CAPITAL RATINGS

Bound in Flexible Leather Covers

This list now contains 24,872 names. The 1896 Edition has been revised and brought up to date, over 7,000 changes having been made.

D. T. MALLETT, Publisher

Price \$2.

271 Broadway, NEW YORK

AMONG THE RETAILERS.

*Commutation
Tickets.*

In conversation with a retailer that keeps a store about 40 miles from Toronto I had the opportunity of learning what results the ceasing of the issue of the commutation tickets has had upon the country trade. While they were being issued people within the radius of that distance from Toronto used to come into the city as often as occasion required to do their shopping at the department stores. Now, however, the traveling expenses are too great to warrant the trip for that purpose alone, and as a consequence the country stores get more of their rightful trade. On the other hand, the merchants used to come, too, in order to pick up bargains and pointers among the wholesale warehouses. Although they do not come as frequently now, yet they do not feel the expense when large purchases have to be made, and can on that account continue to visit the city while their customers cannot. Thus, then, the thanks of these country storekeepers is due to the railway companies.

*There is
Still Hope.*

While the building season should be at its height now, it is really commencing, and, as a consequence, hardware merchants should not yet start to grumble at the smaller sales

of building hardware than in former years. The delay in demand is due to the same causes that have retarded other enterprises—cold and wet spring weather. And as the fall is no longer the terminus of the building season, large movements in plumbers' and builders' hardware may be looked for later in the year.

*Some Ideas in
Window
Dressing.*

There is no doubt but that window dressing is daily becoming more of an art. The window is gradually being considered the most important part of the store, as it should be. Although the art cannot be mastered in a little time and without a good deal of experience, yet I notice there are a few special principles that are worthy of a good deal of attention and which, if acted upon, will materially improve the appearance of the windows. Of course, the style and size of the windows determine to a greater or less extent the possible appearance. It is important that the window should be well lighted and that there should be more than one pane of glass in connection with it. In my opinion, mirrors at the back and sides of the window are greater factors in adding to the appearance of a dressed window than is anything else. Another tendency that must be guarded against by inexperienced window dressers is the desire to put too many goods on display. People don't

stay long looking at a window, and they cannot see everything in a minute, therefore it is better to have only one or two special lines of goods for them to notice. Then, too, the window should be a place to display goods that a merchant is desirous of getting rid of, and as he is generally devoting his energies to the getting rid of one line only, the window should contain samples of that one article. But these samples should not be placed on the floor of the window, huddled together, as if they were put there out of the way, and as if the floor of the window was intended to be hidden. The goods should be scattered and hung around in a position that gives a pleasing appearance. Another necessity for a well-dressed window is some colored cloth or felt spread on the floor which, I notice, all nicely dressed windows have.

*Paris
Green.*

The price of Paris green, which is this season considerable higher than it was last year, and the consequent grumbling of the retailers' customers, have given rise to numerous schemes for cutting prices and drawing trade in this line, which is one of the main factors of the spring trade. Some dealers have not hesitated at being dishonest, for I hear that in their stores the Paris green is composed, to some extent, of flour or some such substance. Of course, we cannot ad-

BICYCLES AT COST...

We have sold the whole of our season's supply with the exception of a few PHOENIX Wheels (Ladies' and Gents'), and JUPITERS (Gents' only). These we offer at cost, and will be pleased to quote prices on application.

PARIS GREEN... Guaranteed Pure.

50-lb. Drums. 1-lb. Papers.

All orders shipped same day as received. Reduced prices. Order at once.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

dress the dealers who do this and advise them not to; but in such cases the competitors of those who employ such dishonest schemes have surely privileges which they otherwise would not have. As a general rule merchants should not talk disparagingly of their competitors, but if a dealer is sure that dishonesty is being employed to his injury, I think that he should make the fact known. The affair, however, needs no enlarging upon. The advantages and disadvantages are well enough known.

CATALOGUES, BOOKLETS, ETC.

A BOOK ON COLLECTIONS.

“CREDITS, Collections and Their Management” is the title of a new book edited by W. H. Preston, first president of the National Association of Credit Men. In his own experience he has studied the methods and forms in use in many of the best credit departments of the country, and he has embodied the best into a comprehensive system in successful daily operation under his supervision, which he has described.

The book is really intended for credit men, who are employed by many houses in the United States, but it contains some valuable suggestions for managers of credit businesses in any country.

Wholesale houses have for years assumed that a certain amount of losses are inevitable, and without enquiring into the causes have not understood that a large percentage could be avoided.

Mr. Preston says in his introduction: “Competition waxes strong, margins are dwindling, expenses are increasing; the losses must be materially lessened, or many must succumb.” It is a system to lessen these losses that Mr. Preston describes.

D. T. Mallett, 271 Broadway, New York, publisher of The Hardware Dealers' Magazine, has now ready his Hardware Directory of the wholesale and retail hardware dealers of the United States and Canada. The new edition is the list of 1896, revised, with about 7,000 names added. It is bound in flexible leather covers and sells for \$2.

Abbott & Co., 219 DeLorimier avenue, Montreal, have issued an artistic price list of the goods turned out from their rolling mills. It is not elaborate, it is not intended to be so. It leaves space for dealers to put prices in their proper place in the list, and it gives a list of productions of the mills. The private crest of the members of the firm is embossed in gilt in the issue, and altogether it has a rich appearance. Apply to the firm and one will be sent.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and
Bronze Plated and Real Bronze.
Sold by all Jobbers.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of

10 cents

HARDWARE AND METAL, Toronto



The Hamilton Blast Furnace Co., Ltd.

HAMILTON,
Canada.

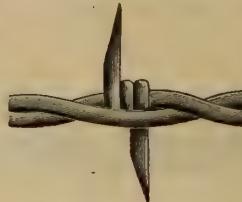
Manufacturers of

HIGH GRADE PIG IRON.

BEST GALVANIZED BARB WIRE



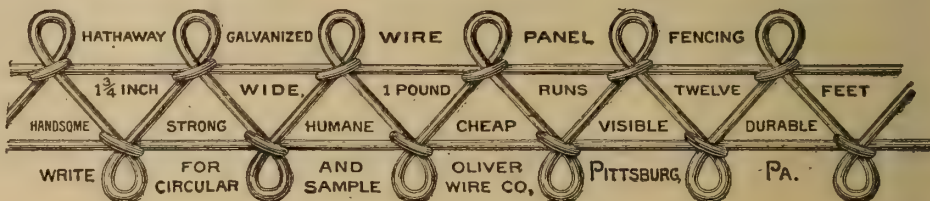
Cactus Interlocked



Genuine Glidden



Light Baker



Represented by

A. C. LESLIE & CO.

MONTREAL

OLIVER WIRE COMPANY

Pittsburgh, Pa.

A Household Brush



Brushes,
Brooms,
Woodenware.

Remember one thing—women use the brushes about the house. Lose one woman's confidence on the quality of the brushes you sell and you lose that woman's trade. But that is not all—women will talk you know. Ten to one she'll tell all her friends about it. Lots more trouble to follow. Boeckh's Brushes are made on honor. Your money back if you want it.

Chas. Boeckh & Sons, Mfrs.

Toronto, Ont.

PORTLAND CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices.

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

A PERFECT FILTER



Convenient in size ;
neat in appearance.
Should be in every
office and dwelling.
For prices, etc., write—

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Stoneware
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Belleville, Ont.

BOOKS FOR THE RETAILER

Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from *HARDWARE AND METAL*.

Necessary Books for a Retailer

By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

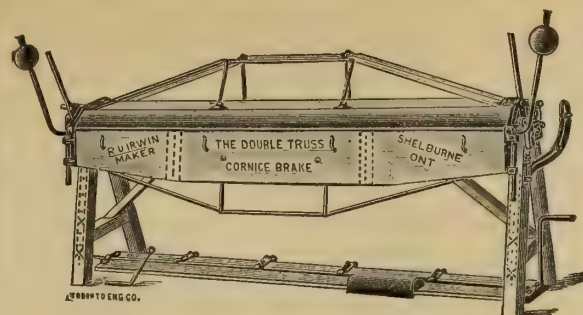
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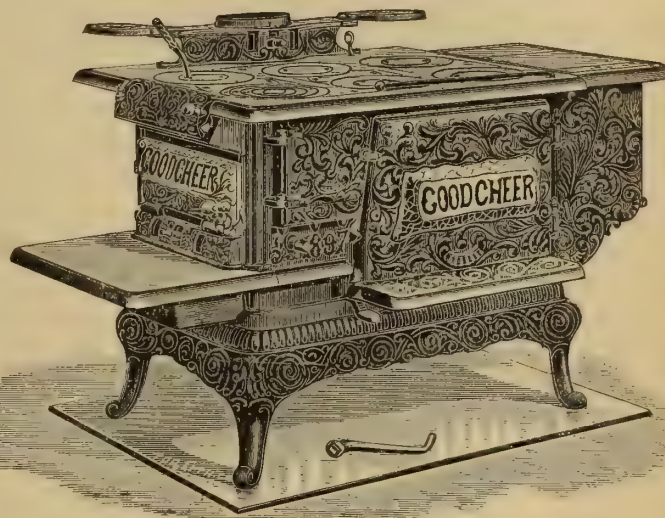
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice
Brake Co. **SHELBURNE, ONT.**

Good Cheer Ranges

LARGE
STEEL
OVENS

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

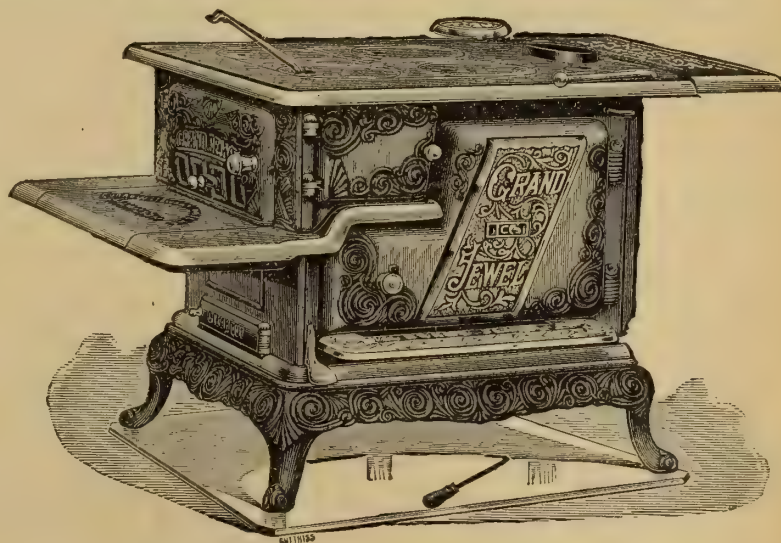
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GRAND JEWEL COOK STOVES...

For WOOD
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With
Patent
One-piece
Cold-rolled

SHEET
STEEL
OVEN.



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HAMILTON, ONT.

Manufacturers of all kinds of

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Stoves, Ranges, and Hot Air Furnaces.

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Agents for the Provinces
of Quebec, Nova Scotia,
New Brunswick and
Prince Edward Island.

W. L. Haldimand &
Son,
MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

HAMLIN & BURK, general merchants, Emsdale, Ont., have assigned to E. J. Henderson, Toronto.

F. Tremblay, general merchant, Les Eboulements, Que., has assigned.

Jesse Hockin, shoemaker, Woodstock, Ont., has assigned to David Haig.

Thomas B. Jupp, harness merchant, Grand Valley, Ont., has assigned to W. R. Scott.

Fraser Richardson, lumber merchant, Lower Brighton, N.B., is asking an extension.

John Hyde has been appointed curator of the estate of J. P. Landry, general merchant, Hull, Que.

Therien & Co., general merchants, St. Remi, Que., are offering to compromise at 50c. on the dollar.

A meeting of the creditors of Moore & Kerr, general merchants, Orillia, Ont., was held on the 29th inst.

Royer & Burrage have been appointed curators of the general business of G. H. Kerr, Lake Megantic, Que.

E. W. Nesbitt, has been appointed permanent liquidator for the New Barnes Cycle Co., Limited, Hamilton, Ont.

A meeting of the creditors of F. Bowman & Co. sporting goods, etc., Ingersoll, Ont., was held on the 27th inst.

A meeting of the creditors of L. Beaudet, general merchant, St. Jean des Chaillons, Que., was held on the 23rd inst.

A meeting of the shareholders of the Guelph Norway Iron and Steel Co., Limited, will be held August 5th to appoint a liquidator.

PARTNERSHIPS FORMED AND DISSOLVED.

Paul & McKinnon, coal dealers, Winnipeg, have dissolved partnership.

Bathie & McLarty, machinists, Hartney, Man., have dissolved. John Bathie continues.

The firm of McDonald & Dunning, general merchants, Cumberland, Que., has been dissolved. D. N. McDonald continues.

Etienne Robert and Prudent Robert have formed a partnership in Montreal to trade as builders under style, Etienne Robert & Frere.

Edward Thomas, Alfred Laver and Wm. H. Cheney have formed a partnership in Montreal to trade under the style, Montreal Bicycle Works.

In connection with the firm Rimer, Leewen & Co., general merchants, Otterburne, Man., N. T. Carey has been admitted and Rimer retires. Style now is N. T. Carey & Co.

J. A. Bancroft, W. C. Healey, W. H. Winchester, Chas. Spurr, S. E. Bancroft, James and Edward McDormand,

James and Wm. McLaughlin, George and Frederick Armstrong, have formed a partnership in Roundhill, N.S., to run a general store under the style S. E. Bancroft & Co.

John Selleck, of the lumber and shingle mill at Kemptville, Ont., is admitting Albert Brinston as partner, under the style of Selleck & Brinston.

Edmond Laberge and Alphonse Gauthier have formed a partnership in Montreal to trade as masons and builders, under the style of Laberge & Gauthier.

The firm of Scott, Lawton & Love, manufacturers of doors and sashes, St. John, N.B., has been dissolved. Business will be continued by Wm. Scott and Wm. Lawton, under style of Scott & Lawton.

SALES MADE AND PENDING.

The general stock of W. J. Pepper, Shedden, Ont., has been sold.

E. H. Suffel, general merchant, Vienna, Ont., has advertised his stock for sale.

J. White, general merchant, Oak Lake, Man., is advertising his business for sale.

The general stock of James Gillies, Metapedia, Que., has been sold at 51c. on the dollar.

R. Stafford, general merchant, Joliette, Que., has sold his stock at 65c. on the dollar.

The general stock of the late Clara Laidlaw, St. George, Ont., is advertised for sale by tender.

The assets of A. P. Beaudette, hardware merchant, Quebec, are advertised to be sold August 3rd.

The assets of H. Blanchette, general merchant, Valracine, Que., are to be sold the 3rd prox.

The assets of Jos. Comfoltez, general merchant, St. Michel, Que., are advertised to be sold August 2.

The general stock of C. H. Gerbig, Ayr and Woodstock, Ont., is advertised to be sold by auction August 3.

The assets of D. P. Cottingham & Co., wholesale and retail dealers in paints, have been sold at 45c. on the dollar.

The machinery, stock, etc., in connection with the (estate of) Cutler Bros., manufacturers of bicycles, Toronto, is advertised to be sold by auction on the 30th inst.

CHANGES.

Charles J. Lindstone has opened out a general store at O'Leary, P.E.I.

R. Thomas Vooght, Baddeck, N.S., has opened out in a general business.

H. Giegerich, general merchant, Sandon, B.C., has sold out to D. W. French & Co.

Mrs. E. O. Taylor, general storekeeper, Burk's Falls, Ont., has sold out to Jackson Bros., Gore Bay, Ont.

Jacob Wener is starting a business in the manufacture of waterproof clothing in Montreal.

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with Flint or Sand Papers.

WESTERN

Incorporated 1851.

ASSURANCE COMPANY**Fire and Marine**

Capital, subscribed \$2,000,000.00

Capital - - - 1,000,000.00

Assets, over - - 2,320,000.00

Annual Income - 2,300,000.00

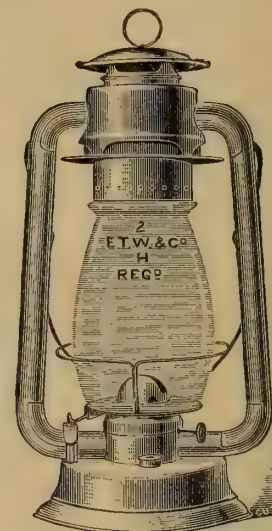
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Manufacturers of ...

Tubular and
Cold Blast
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Re-tinned
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..TINWARE



HAMILTON - CANADA.

**"It's the Wick
Does the Trick"****Wolff-American
High Art Cycles.****Have
Self-
Oiling
Bearings.**REQUIRE NO ATTENTION — HOLLOW
AXLE CONTAINS WICK HOLDING ENOUGH
OIL FOR 1,500 MILES OF RIDING.**DORKEN BROS. & CO.**

MONTREAL.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, **payable strictly in advance.** Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminium. Close Plating and Electro-Plating.

H. C. Woodside, blacksmith, Port Arthur, has been succeeded by David J. Moore.

J. Brown is commencing business in Montreal as manufacturer of shoe tacks.

H. R. Shaw, Bridgetown, N.S., has sold out his hardware business to W. Benson.

The Ritchie Hardware Co., Nelson, B.C., has been succeeded by the Nelson Hardware Co.

The estate of Wm. McRossie, lumber merchant, Kingston, Ont., has been sold to Wm. Massie, jr.

M. Alphonse Montminy, Sherbrooke, Que., has been registered as sole proprietor of the business done by Montminy & Frere, painters.

FIRES.

J. A. Bunn, machinist, Cayuga, Ont., has been burnt out.

W. M. Dean, Sprucedale, Ont., had his sawmill burned down.

H. Silver, painter, Lindsay, Ont., has sustained damage by fire.

J. T. Goldthorpe, general merchant, Saltford, has been burnt out.

Sadler Bros., general merchants, Wiar-ton, have been burned out.

The Toronto Brass Co., Limited, has been partially burnt out. Fully insured.

Charles Hackett, Ahouset, B.C. has had his general stock burnt out. It was insured.

The shingle mill of James Hurley, St. Gabriel, Rimouski, Que., has been burned down.

J. A. Blondin, general merchant, St. Maurice, Que., has been burnt out. Partially insured.

DEATHS.

Thomas Wand, contractor, Montreal, is dead.

E. G. Butler, general merchant, Chester, N. S., is dead.

Isaac Marsten, general merchant, Eel River, N. B., has died.

John J. Armstrong, dealer in carriages, Hamilton, Ont., is dead.

Ira Cornwall, of the Ira Cornwall Co., Limited, sporting goods, St. John, N.B., is dead.

HORSE NAIL MEN MEET.

There was a meeting of the Horse Nail Association at Montreal on Wednesday, but nothing was done beyond a discussion of the situation. It was considered that the time was not opportune for any change in prices at present.

SEND FOR ONE.

A copy of the 358-page catalogue that the Peterborough Lock Co. have just issued, will be forwarded to any dealer in Canada upon application to the firm.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Ltd.

ADVERTISING DEPARTMENT

MONTREAL

TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed
Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass
Work

Address—
Toronto Fence and
Ornamental Iron Works
Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelties, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

CORPORATE MARK



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS.

TORONTO, July 30, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.

J.L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X.,	6 25	
I.X.X.,	7 50	
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Raven & P. D. Grades—		
I.C., usual sizes	3 50	3 60
I.X.,	4 50	4 60
I.X.X.,	5 50	5 60
I.X.X.,	6 50	6 60
D.C., 12½x17	3 50	3 75
"X.,	4 50	4 75
D.X.,	5 75	6 00

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 15	
I.C., special sizes	3 25	
20x28	6 25	

Charcoal Plates—Terne.		
Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 25	6 50
I.X., Terne Tin	8 00	
I.X., Orion	8 00	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs	0 05½	0 06
" 14x60,		
" 14x65,		
Tinned Sheets.		
72x30 up to 24 gauge	0 06	0 06
" 26	0 06½	
" 28	0 07½	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	1 80	
Band	2 25	
Hoop	2 25	
Swedish	4 00	4 25
Sleigh Shoe Steel	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10½	0 11
Tank Plates, 1-5 and thicker	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½-inch	0 06½	
2	0 07½	
2½	0 09½	
3	0 11	

Steel Boiler Plate.

¾ inch	2 45	
1 inch	2 35	

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier.....	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24	2 35	
26	2 45	
28	2 55	

Canada Plates.

All dull, 52 sheets	2 50	
Half polished	2 50	2 60
All bright.....	3 00	3 25

Iron Pipe.

Wrought, ¼ to ¾ inch, \$1.87; ½ inch, \$2.10;		
¾ inch, \$2.45 to \$2.50; 1 inch, \$3.40; 1¼		
inch, \$4.50; 1½ inch, \$5.87 to \$6; 2 inch,		
\$7.87 to \$8.		
Galvanized, ½ inch, 4c. ¾ inch, 4½c. 1 inch,		
6¾c. 1¼ inch, 10½c. 1½ inch, 11½c.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 5 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
16 gauge	0 03½	
18 to 20 gauge	0 03½	
24 gauge	0 03½	
26	0 04	
28	0 04	4 25

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼	4 75	
" ½	4 00	
" ¾	3 75	
" 1	3 35	
" 1½	3 25	
" 2	2 95	
" 2½	2 85	
" 3	2 75	
Trace, per doz. pairs.....	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per		
doz. yards	0 13	0 50
Jack chain, double, per doz.		
yards	0 15	
Jack chain, brass, single, per		
doz. yards	0 20	10

Copper.

Ingot.		
English B. S., ton lots	0 11½	0 12
Lake Superior		

Bolt or Bar.

Cut lengths, round, ½ to ¾ in.		
round and square		
1 to 2 inches.....	0 18	0 19

NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16		
oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16		
oz., irregular sizes	0 15	0 16½

NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.

Planished and tinned, 14x48		
and 14x60	0 25	0 27
Braziers. (In sheets.)		
4x6 ft. 25 to 30 lbs. ea., per lb.	0 17	0 19
" 35 to 45	0 15½	0 16½
" 50 lb. and above,	0 15	0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb	0 21	
Spun, per lb	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12½ p.c. off list.		
From 20 gauge up, 12½ p.c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c.		
off list.		
nests, hard-rolled, 2x4 ft.	0 20	0 00

Zinc Spelter.

Foreign, per lb	0 04½	0 04¾
Domestic	0 03¾	0 04

Zinc Sheet.

5 cwt. casks	0 05½	
Part casks	0 05½	

Lead.

Imported Pig, per lb	0 03½	0 03½
Domestic, per lb	0 02¾	0 04
Bar, 1 lb.	0 04½	
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04½
Sheets, 3 to 6 lbs., per sq. ft.,		
by roll.....	0 04	0 04½

NOTE.—Cut sheets ½ cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half	Per lb. Pe	
Standard	0 11	0 11½
Wire	0 10½	0 11
"	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb	0 08	0 08½

Anti-Friction Metal.

'Beaver' brand	Per lb.	
.....	\$0 20	

White Lead.

Pure, Assoc. guarantee, ground in oil,		
25 lb. irons	5 15	
No. 1 do	4 77½	
No. 2 do	4 40	
No. 3 do	4 02	
No. 4 do	3 65	

Brandram's B. B. Genuine .. 6 25
" Decorative .. 5 95
" No. 1 .. 5 35
" No. 2 .. 4 65f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine .. 6 50
No. 6 00

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
" Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe		
cwt	1 35	1 40
Yellow Ochre (J. F. L. S.), bbls.		
per cwt	2 75	
Yellow Ochre (Royal), per		
cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt	3 00	3 25
American Oxides, per cwt	1 75	1 90
Canadian Oxides, per cwt	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	
" Umber,	0 10	
do.	0 09	
Drop Black, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03¾	
Ultra marine Blue in 28-lb.		
oxes, per lb	0 08	

Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks	0 13½	
50-100 lb. kegs.	0 14	
25-lb. irons ..	0 14½	
1-lb. Boxes	0 15	

Sulphate of Copper.

Casks, for spraying, per lb.	0 04¾	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)		
No. 1 Furniture, per gal	0 65	
Extra	0 90	
Brown Japan	0 65	
Brown Japan, Turpentine, p.g	0 85	
No. 1 Carriage, per gal	1 30	
And ex. No. 1 Carriage	1 60	
Gold Size Japan, per gal.	1 00	1 20
Pure Orange Shellac	1 85	2 20
Hard Oil Finish	1 20	
Oil Shellac	1 20	
White Shellac	2 25	

Linseed Oil.

Raw, per gal. net	0 41	
Boiled, per gal. net	0 44	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net	0 41	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 08½	
Small lots	0 09	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
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Glue.

(In bbls.)		
Common	0 07¾	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatine	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear	0 09	

Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent.		
Amer.		
Central Fire Cartridges, pistol sizes, Dom.		
30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and		
"Dominion" grades, 25 per cent. Rival		
and Nitro, 17 p. c.		

Shot.
Canadian, common, 17½ per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.	
Best thick white felt wadding, in ½-lb bags.....	per lb 1 00	Annex, per doz.....	1 25 1 75	Canadian dis. 25 per cent.		Nail	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	Mascott, ".....	1 35 1 85	Dies.		Maydole's, dis. 5 to 10 per cent. Can., dis 25 to 27½ per cent.	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	Erminie, ".....	1 12 1 20	Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		Tack.	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	Blind and Bed Staples.		Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		Magnetic, per doz.....	1 10 1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	sizes, per lb.....	0 7¼ 0 12	Door Springs.		Sledge.	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	Bolts.		Torrey's Rod, per doz..... (15 p.c.)	2 00	Canadian, per lb.....	0 07½ 0 08½
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	Carriage, dis. 70 p. c. off new list		Coil, per doz.....	0 88 1 60	Ball Pean.	
Thin card wads, in boxes of 1,000 each 8 gauge.....	1 40	Tire, dis. 70 and 5 per cent.		English per doz.....	2 00 4 00	English and Can., per lb.....	0 22 0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	Stove dis. 70 and 5 per cent.		Draw Knives.		HANDLES.	
11 and smaller gauge.....	0 60	Elevator, dis. 35 to 40 per cent		American, dis. 70 and 10 per cent.		Axe, per doz., net,.....	50 2 00
9 and 10 gauges.....	0 70	Machine, dis. 70 p.c.		Canadian, dis. 25, 50 and 10 per cent.		Store door, per doz.....	1 00 1
7 and 8 gauges.....	0 90	Coach Screws, dis. 77½ p.c.		Drills.		Chest, per doz. pairs.....	0 40 2 50
5 and 6 gauges.....	1 10	Boring Machines.		Hand and Breast.		Chisel.	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		Complete, with augers, each.....	5 00 7 50	Miller Falls, per doz.....	16 00 51 50	Firmer, per gross.....	3 00 4 50
11 and smaller gauge.....	1 15	Braces.		P. S. & W., dis. 40 per cent.		Socket Firmer, per gross.....	3 25 8 00
9 and 10 gauges.....	1 40	Barber's.....	6 00 7 75	DRILL BIT.		Socket Framing, per gross.....	3 75 5 00
7 and 8 gauges.....	1 65	Barber's Ratchet.....	10 00 11 00	Morse, dis. 37½ to 40 per cent.		Fork.	
5 and 6 gauges.....	1 90	Farmers.....	2 00 2 75	Standard, dis. 47½ to 50 per cent.		C. & B., dis. 50 per cent. rev. list.	
Anvils.		Har's Falls.....	15 50 29 00	ELBOWS.		Hoe.	
Per lb.....	0 10 0 12½	Brackets.		Stovepipe.		C. & B., dis. 50 per cent. rev. list.	
Anvil and Vice combined, each.....	4 50	Shelf.		Per doz.....	75 1 70	Saw.	
Wilkinson & Co.'s Anvils..lb.	0 09 0 09½	Japanned Canadian, per doz.	0 50 3 40	FAWCETS.		American, per doz.....	1 00 1 25
Wilkinson & Co.'s Vices..lb.	0 09½ 0 10	pairs.....	0 85 3 20	Cork Lined, per doz.....	0 30 0 35	Plane.	
Augers.		Berlin Bronze Canadian.....	0 85 3 20	Wine, per doz.....	1 30 3 25	American, per gross.....	3 15 3 75
Gilmour's, discount 65 per cent.		Broilers.		Star.....	2 80 3 90	Canadian, 35 per cent.	
Hollow Stearn's, per dozen.....	13 00 20 00	Light, dis.. 65 to 67½ per cent.		Fenn's Corkstops, No. 2, per dozen.....	1 70	Cross-Cut Saw.	
Adjustable Stearn's, each.....	5 50 6 50	Reversible, dis., 65 to 67½ per cent.		Petroleum, per doz.....	4 50 6 50	Canadian, per pair.....	0 15 0 0
Post-hole, Vaughan's, each.....	1 35 1 60	Vegetable, per doz., dis. 37½ per cent.		FILES AND RASPS.		HANGERS.	
Excelsior, Jennings', discount 50 per cent.		Henia, No. 8, ".....	6 00	Globe File Mfg. Co.'s dis., files and rasps, 30 and 10 to 70 per cent.		Door, 4 and 5 inch, per pair.....	0 40
Awls.		Henia, No. 9, ".....	7 00	Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		Lanes, 50 to 50 and 5 per cent.	
Sewing, per gross.....	0 65 1 59	Queen City.....	7 50 10 00	Black Diamond, 50 and 10 per cent. to 50 10, 5.		HATCHETS.	
Pegging, ".....	0 65 1 25	Butchers' Cleavers.		Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		Canadian, dis. 40 to 42½ per cent.	
Brad, ".....	0 85 1 60	From 8 to ch, per doz.....	4 23	Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		HINGES.	
" handled, per gross.....	3 60 30	Butts.		Heller's Horse Rasps, 50 per cent.		Blind, Parker's, dis. 60 and 10 to 65 per cent'	
Saddler's, per gross.....	0 45 1 60	Brass.		Jowitt's, English list, 25 to 27½ per cent.		" Shepard's Noiseless, dis. 60 per cent.	
Awl Hafts.		Cast Iron.		American, 60 to 60 and 5 per cent.		" Buffalo, dis. 60 to 70 p. c.	
Patent Peg, oss.....	7 25 8 00	Loose Pin, dis. 70 per cent.		Great Western, 60 and 10 per cent.		Light T and strap, 70 p.c.	
" Sewing, per gross.....	7 25 8 00	Can Openers.		FLUTING MACHINES.		Heavy, per lb.....	0 03½ 0 04½
Awl and Tool Sets.		Acme, per gross.....	9 00 10 00	Each.....	0 60 2 00	Screw hook and hinge—	
Miller's Falls, per doz.....	2 80 3 30	Sardine Scissors, per doz.....	3 75 4 50	Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.		6 to 12 in., per 100 lbs.....	3 15
AXES.		Card.		FREEZERS		14 in. up, per 100 lbs.....	2 35
Splitting Axes.....	5 25 5 50	Horse, per do.....	0 60 1 00	Ice Cream.		Per doz. set.	
Chopping Axes—		Carpet Stretchers.		Gem, from \$1.25 to \$7 net.		Screw Eureka.....	1 13 1 80
Black Prince.....	7 25 7 50	American, per doz.....	1 00 50	FRUIT PRESSES.		Gate, Clark's.....	1 50 2 20
Forest Clipper.....	8 50 9 00	Bullards, per doz.....	6 50	Henis', per doz.....	3 25 3 50	" Shepard's, dis. 50 to 60 per cent.	
Lance.....	8 50 9 00	Carpet Sweepers.		Enterprise, dis. 10 per cent.		Per doz. pai	
Mann's.....	8 00 8 25	Bissell, per doz.....	22 50	Shepard's Queen City, dis. 15 per cent.		" Shepard's Samson.....	1 00 3 50
Maple Leaf.....	9 50 10 00	World, ".....	21 75	FRY PANS.		HOES.	
Hand Made.....	7 50 7 75	Daisy, ".....	24 00	Acme, dis. 62½ to 65 per cent.		Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list	
Climax.....	8 00 8 25	Star.....	18 00	GAUGES.		Planter, per doz.....	4 00 4 50
Phantom.....	8 25 8 50	Crown Jewel, per doz.....	29 00	Marking, Mortise, Etc.		HOOKS.	
Axle Grease.		Grand Rapids, ".....	33 00	Stanley's, dis. 50 to 55 per cent.		Cast Iron.	
Per gross.....	6 00 13 00	Cartridges.		Wire Gauges.		Bird Cage, per doz.....	0 50 1 10
Bath Tubs.		(See Ammunition.)		Winn's, Nos. 28 to 33, each.....	1 65 2 40	Clothes Line, per doz.....	0 27 0 63
Zinc, discount.....	3 90 4 0	Castors.		GLASS.		Harness, per doz.....	0 72 0 88
Copper, discount, 40 and 10 p.c. off revised list		Bed new list, dis. 55 to 57½ per cent.		Window.		Hat and Coat, per gross.....	1 00 3 00
Steel clad, 20 per cent. discount.		Plate, dis. 55 to 57½ per cent.		Box Price.		Chandelier, per doz.....	0 50 1 00
Boxing extra		Cattle Leaders.		Double Diamond.		Wrought Iron.	
Bells.		Nos. 31 and 32, per gross.....	8 50 9 50	Per 50 ft.		Wrought Hooks and Staples, Can., dis. 47½ per cent.	
Hand.		Cement.		Per 100 ft.		Wire.	
Brass, 60 per cent.		Canadian, Portland.....	2 50	Per 50 ft.		Hat and coat, dis. 60 to 60 and 10 p.c.	
Nickel, 55 per cent.		English.....	2 75	Per 100 ft.		Belt, per 1,000.....	0 60 2 70
Door.		Belgium.....	2 50	HORSE NAILS.		crew, bright, Eng., dis. 60 per cent.	
Gon Sargent's.....	5 50 8	Canadian hydraulic.....	1 10	HORSE SHOES.		KETTLES.	
" Peterboro', discount 50 per cent.		Figures are for carload lots.		GLUE POTS.		Brass spun, 7½ p.c. dis. off new list.	
Cow.		Chalk.		Tinned, each.....	0 30	Copper, per lb.....	0 30 35
American make, discount 66½ per cent.		Carpenters' Colored, per gross.....	0 45 0 75	Enamelled each.....	0 55	American, 60 and 10 to 65 and 5 p.c.	
Canadian, discount 45 and 50 per cent.		White lump, per cwt.....	0 60 0 65	GRINDSTONE FIXTURES.		KEYS.	
Farm.		Red.....	0 05 0 06	P. S. & W., per doz.....	3 30 4 00	Lock, Can., dis. 50 p.c.	
American, each.....	1 25 3 00	Crayon, per gross.....	0 14 0 18	Chisels.		abinet, trunk, and padlock,	
House.		Chisels.		Socket, Framing and Firmer.		Am. per gross.....	1 60
American, per lb.....	0 35 0 40	American, dis. 75 to 77½ per cent.		American, dis. 75 to 77½ per cent.		KNOBES.	
Bellows.		Canadian, dis. 50 and 10 per cent.		Canadian, dis. 50 and 10 per cent.		Door, japanned and N.P., pe	
Hand, per doz.....	3 35 4 75	Tanged firmer, per doz.....	0 85 4 00	Churns.		doz.....	0 85 3 00
Moulders', per doz.....	7 50 10 00	Clamps.		Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		Bronze, Berlin, per doz.....	2 75 3 25
Blacksmiths', discount 60 per cent.		Judds', dis. 20 per cent.		Steel, net.....	3 00	Bronze Gem, ".....	6 00 9 00
Belting.		Stearn's, per doz.....	3 00 10 00	Clips.		Sava, ".....	8 75 10 00
Extra, 40 and 10 per cent.		Clips.		Axle dis. 65 per cent.		Shutter, porcelain, F. & L.	
No. 1, leather, discount 60 per cent.		Coffee Mills.		Compasses, Dividers, Etc.,		screw, per gross.....	1 30 4 00
Standard, 55 per cent.		Bo.....	3 60 13 00	American, dis. 62½ to 65 pe cent		KEYS.	
Agricultural, 65 and 10 to 70 p.c.		Side.....	3 60 4 00	Churns.		KEYS.	
Bench Stops.		Enterprise, No. 0.....	1 35	Churns.		KEYS.	
Per doz.....	5 00 6 00	" No. 2.....	70	Churns.		KEYS.	
Bits.		Clamps.		Churns.		KEYS.	
Auger.		Clamps.		Churns.		KEYS.	
Gilmour's, discount 65 and 5 per cent.		Clamps.		Churns.		KEYS.	
Excelsior, discount 60 per cent.		Clamps.		Churns.		KEYS.	
Rockford Common, 65 to 65 and 5 per cent.		Clamps.		Churns.		KEYS.	
" Perfection, 50 and 10 per cent.		Clamps.		Churns.		KEYS.	
Jennings' Gen., net list to 5 p. c. discount.		Clamps.		Churns.		KEYS.	
Car.		Clamps.		Churns.		KEYS.	
Gilmour's, 47½ to 50 per cent.		Clamps.		Churns.		KEYS.	
Expansive.		Clamps.		Churns.		KEYS.	
Clark's, per cent.		Clamps.		Churns.		KEYS.	
Excelsior, 10 per cent.		Clamps.		Churns.		KEYS.	
Gimlet.		Clamps.		Churns.		KEYS.	
Clark's, per doz.....	0 65 0 90	Clamps.		Churns.		KEYS.	
Diamond, Shell, per doz.....	1 00 1 50	Clamps.		Churns.		KEYS.	
Nail and Spike per gross.....	2 25 5 20	Clamps.		Churns.		KEYS.	

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 90 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 37 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50
 Cabinet,
 Eagle, dis. 27½ to p.c.

PADLOCK.

English and Am., per doz. 0 50 6 00
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Flat head, discount 25 p.c.
 Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 08
 Mystic Metal, " 08
 F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50
 Carpenters', hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.95 f.o.b., Toronto, Montreal, Hamilton, London.

Cut Nails (Steel). Add 10c. to the prices in list for iron nails. 10-keg lots freight prepaid to maximum of 25c. per 100 lbs.

Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburgh is less than carload lots does not exceed 21c.; other places where rate is higher, excess is added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.

Trade and moulding nails, 80 p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00

Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
 Carbon safety " 0 18 0 00
 Canada w. w. " 0 18 0 00
 American w. w. " 0 00 0 21
 Pratt's Astral. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

" Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 65 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis, Mfrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range 1½ to 4. 100 00

No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.

Wood, fancy Canadian or American, 37½ to 40 per cent.
 Bailey's (Stan. R. & L. Co.), 50 per cent.
 Miscellaneous, dis. 25 per cent.
 Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hotchouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, 70 to 70 and 5 p.c.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors', " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 03½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis. 60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Bokers', " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclusive, 61 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. ir. ½-lb. boxes and

cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 5½ 00 7½

¾ in. " 5½ 00 7½

½ and 5-16 in. " 6½ 00 8½

Cotton " 15 17

Russia Deep Sea " 00 13

Jute " 6½ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 60 1 00

N.P., per set. " 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

E. & A. sand, 40 and 5 to 45 per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempbell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 25

SAWS.

Crosscut, McMillan & Haynes, per dozen 0 40 0 70

"Empire," McMillan & Haynes, per ft. 0 00 0 70

Hand, Disston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Disston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 0 00 7 50

Whiting. " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.
 B. S. & M. Scales, 50 p.c.
 Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

oot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 40 to 45 p.c.

SHEARS.

B. & W., jappaned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, jappaned, 80 p.c.

N.P., dis. 70 p.c.

Clauss, full nickel, 60 p.c.

jappaned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

" tinned, " 1 25 1 35

Tin rim, per doz. 2 30 2 45

" black. " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme " 3 00 5 00

Lock, Andrews' " 4 50 11 50

SOLDERING IRONS.

Per lb. 0 00 0 24

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English. 1 8 5 00

Iron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross. 7 50 12 00

Dessert, " 21 00 00 00

Table, " 30 00 30 00

Dessert Forks, " 24 00 00 00

Medium " 27 00 00 00

Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90

Steel, dis. 70 per cent., revised list.

Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized. 00 2½ 00 2½

Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washtia, per lb. 0 28 0 60

Hindostan, " 0 06 0 07

" slips, per lb. 0 09 0 09

Labrador. " 0 00 0 13

" Axe, " 0 00 0 15

Turkey " 0 00 0 50

Arkansas " 0 00 1 50

Water-of-Ayr " 0 00 0 10

Scythe, per gross. 3 50 5 00

Grind. per ton. 15 00 18 00

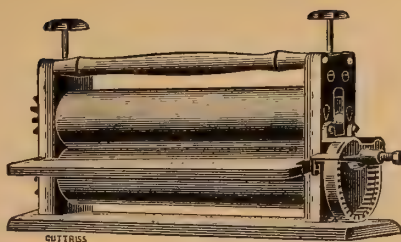
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Lac a lac Tortue. Grand Piles.

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We make all kinds and shades, but each particular kind is manufactured expressly for its own particular purpose; this is probably the key to our success in this line of paints as well as all others.

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They are well advertised and make the neatest shelf packages in the market.

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VOL. IX

MONTREAL AND TORONTO, AUGUST 7, 1897

No. 32



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Not how cheap, but how good !

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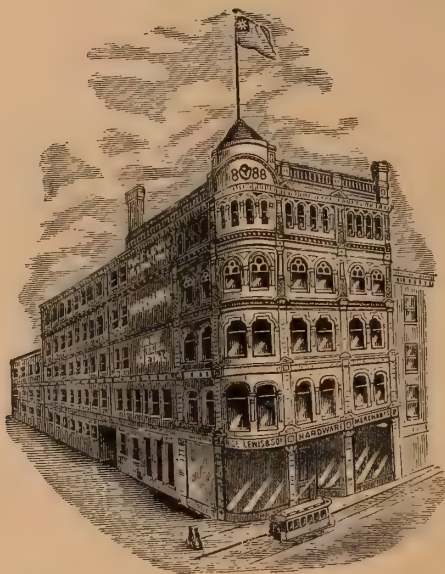
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THE DENOUNCED TREATIES.

ON principle it was proper that Great Britain should give the year's notice necessary to the abrogation of the treaties with Germany and Belgium.

These treaties were the relic of a by-gone age—an age when the Motherland did the thinking and the law-making for the colonies—the age preceding the dawn of responsible government.

The treaty with Belgium was made in 1862, and article XV of that instrument provides that articles the produce and manufacture of Belgium shall not be subject in the British colonies to other or higher duties than those which are or may be imposed upon similar articles of British origin.

The treaty with Germany came into existence in 1865 and contained a similar provision, commonly known as the most favored nation stipulations.

Through these treaties there are more than a score of countries besides which enjoy the provisions of these favored nation clauses and which through them will also lose the privileges they impart. They are: Argentine, Austria-Hungary, Bolivia, Chili, Colombia, Corea, Costa-Rica, Denmark,

Dominica, France, Liberia, Madagascar, Morocco, Muscat, Persia, Portugal, Russia, Sandwich Islands, Siam, South African Republic, Spain, Sweden and Norway, Swiss Confederation, Tunis, Uruguay and Venezuela.

This list might have been a great deal larger but for the fact that for some years Great Britain has allowed Canada to decide for herself as to whether or not she would share in the provisions of the treaties being made. The result of this is that since 1880 she has declined in twelve instances and acceded in two. The last treaty to which Canada refused to accede was that between Great Britain and Japan. The decision to do this was arrived at a few months ago, it will be remembered.

The trouble with these favored nation treatment clauses, as far as Canada is concerned, is that they in one important particular limited her power: She was denied the right of framing a Customs tariff giving a preference to imports the product of the United Kingdom. The Dominion could accord such favors to any of the other colonies and Great Britain could to Canada or any other of her possessions. But Canada was denied the right of doing unto Great Britain what she would she should do unto her.

Under the system of responsible government now obtaining in Canada it is natural that such an anomalous condition could not exist forever. The strange thing about it is that it has existed so long.

Interest in the question became active about ten or twelve years ago, when the agitation was revived for a return to the preferential trade which existed up to the

time of England's adoption of free trade. The Macdonald, the Abbott, the Thompson, the Bowell and the Tupper administrations were all in favor of the denunciation of the treaties with Germany and Belgium.

In 1892 a joint resolution from the House of Commons and the Senate was presented to the Imperial Government in regard to the matter. Two years later, at the meeting of the Colonial Conference at Ottawa, the question came in for a great deal of attention. There were representatives present from all the self-governing colonies, as well as Lord Jersey of the Imperial Government, and the outcome was the adoption, unanimously, of this resolution:

That this conference is of opinion that any provision in existing treaties between Great Britain and any foreign power which prevents the self-governing dependencies of the Empire from entering into agreements of commercial reciprocity with each other or with Great Britain should be removed.

This resolution, being the expression of the self-governing portions of the Empire, was undoubtedly the most important deliverance which had up to that time been made. It created a great deal of talk. But still it was apparently not a strong enough aperient to move the home authorities. And probably there would have been no movement yet had not the action of the present Dominion Government placed the Imperial authorities in the peculiar position it did by its preferential tariff treatment of British goods.

The position they were thus placed in left them three alternatives: (1) Compel Canada to observe the treaties, (2) refuse to do anything, (3) denounce the treaties.

To have taken the former course would not only have been foreign to the latter-day policy of the Imperial Government toward

the self-governing colonies, but would have been tantamount to chastising a child for exhibiting a natural preference for its parents. The second would have been unbecoming; and so it did the right and proper thing of denouncing the treaties.

These treaties were cords which fastened the self-governing colonies to an unsavory past.

Great Britain, by refusing, a century and a quarter ago, to relax certain commercial restrictions, lost thirteen of her North American colonies; she has just, by removing certain anomalous commercial restrictions, bound closer to her colonies which have each within themselves the possibilities of a great empire.

And a gratifying feature about it is that Canada created the instrument which was at the same time a knife to cut and a shuttle to weave.

Because there is perspiration on the brow of the merchant and his clerks these days, it is no reason that dust should be on the counters and shelves.

A NEW STEEL HORSESHOE.

For the past six months or so a cheap United States-made steel horseshoe has been finding its way into the Canadian market.

To meet the competition of this shoe the manufacturers in Canada have decided to place an especially-made article on the market to sell at \$3.50 f.o.b. Montreal.

As the horseshoe business is usually in a sort of comatose state till about the beginning of September, it will probably not be for another month before the new shoe will be able to show its effectiveness or otherwise.

SCARCITY IN STEEL RAILS.

The movement in steel rails continues active, particularly in second-hand and light rails of from 16 to 35 pounds to the yard.

Lately there has been a noticeable scarcity in rails, in the light variety more particularly. It seems to be almost impossible to import them in small quantities, and dealers are not willing to lay in a large stock, pay interest on the investment, bear the expense of dockage, and after all run the risk of not selling them in any reasonable length of time. On that account lumber camps are finding buying difficult.

MISREPRESENTING WIRE NAIL PRICES.

“THERE is a great deal of dissatisfaction among the wire nail makers,” remarked a manufacturer of that article to *HARDWARE AND METAL*. “Several of us have been comparing notes, and we find that some of the retail dealers throughout the country are misrepresenting quotations made by different manufacturers and jobbers. In some instances allowances have been made on these false figures. This is not right, but we have found by comparing rates that it is being done.

“Manufacturers are selling their nails based upon the Pittsburgh price with freight and duty added, and this is as low as they can go, and make two ends meet. It looks to me as though the makers will ultimately be compelled to get together and adhere to a uniform price if the retailers are in the habit of misrepresenting the figures they get.

“Of course, I know retailers who make a practice of this are not by any means altogether to blame. There are travelers I know, who, on learning that a merchant has just stocked up with a certain article at a certain figure will say, ‘Oh, I could have sold you at so-and-so,’ naming a price. This naturally makes the retailer dissatisfied, and frequently induces him to write the house from which he purchased, claiming a rebate, thus demoralizing business. It is on account of this that I say manufacturers should adhere to a fixed price. They should either do this or withdraw the guarantee. If they do neither of these things wire nails will go lower even than they are to-day.”

EXPORTS AND HARD TIMES.

A REMARKABLE increase is shown in the exports of manufactured goods from the United States for the fiscal year, which ended on June 30 last.

Their total value is placed at \$276,357,861, or an increase of \$48,000,000 over 1896. As the country's exports of all kinds aggregated \$1,054,987,091, it follows that the proportion of manufactured goods to the whole was 26.78. As regards the total exports of manufactured goods and the proportion of manufactures to total exports, records are established.

While this is undoubtedly an evidence of push and enterprise on the part of the man-

ufacturers in the United States, it can by no means be taken as an evidence of prosperity in the country.

A glance back over the records shows that the marked increase in the exports of manufactured goods from the United States began four years ago with the unusually severe depression which has been hanging like a pall over the country until now.

The fact of the matter is, the United States now manufactures an enormous surplus of goods which must either be allowed to remain in the warehouses or be exported at prices which will induce foreigners to buy them. And the manufacturers choose the latter alternative, although it frequently means an actual loss in money.

It is obvious, therefore, that an increase in exports and hard times sometimes go hand-in-hand.

EVILS IN HOLIDAYING.

Take a holiday, but take it right. A great many people get more harm than good from a holiday, because they have been foolish and not wise in the manner of taking it.

One of the most common things which attack merchants, as well as other people, when they go away for a holiday at the seaside, lakeside or countryside is hunger. They boast that they can “eat like a horse.” And herein is where one of the chief causes of after-holiday illness is to be found.

People go holidaying, or should do so, with the object of obtaining physical and mental rest. Yet when they overfeed themselves they give their stomach more work to do than it is either accustomed to or is able to perform. And when the stomach is overworked and in trouble little benefit comes to the hand or the head from the holiday.

May as well expect an engine to work when the boiler which supplies it with steam is disabled as to expect a man to enjoy good health with his stomach disabled.

It is not the quantity of food a man eats that builds up his body; it is what he digests.

Another holidaying evil is over-indulgence in bathing. People quite unused to it will think nothing of remaining in the water for half an hour or an hour while sojourning at a watering place, when a few minutes is quite sufficient.

Take a holiday, but take care of yourself while you are taking it.

GERMAN VS. CANADIAN SKATES.

THE average cost of skates this season will be considerably below that ruling for the previous year. This is only natural, considering the radical change in the duties in force this season compared with last.

Altogether, jobbers this year are getting their cheaper lines of skates for a reduction of fully 9c. per pair. This applies equally as much to the domestic as the German manufactured skate.

Last year the cheapest German skate cost the jobber in the vicinity of 37c. per pair. This year they are selling at 28c.

The curious part of the situation at present is that the domestic skate manufacturers are keener competitors in the market this season than in 1896.

With German skates selling at 37c. last year, and a protection of 30 per cent. and 10c. per pair, home makers did not come anywhere near meeting the above price. The natural result was that the Germans got the bulk of the business.

It was thought some weeks ago that they would do the same this season under the

lower duties, especially as they had cut prices to 28c. But they have not done so, for German sales agents complain that the competition of the Canadian manufacturers is harder to meet this year under the lower duties and lower prices than it was last under the higher duties and higher prices.

In fact, the native-made skate is being sold as cheap or cheaper than the German, despite the fact that the reduction in the protection afforded on the cheaper lines of goods is equivalent to a cut of 9c. per pair, or exactly what the Germans have marked their prices down to.

This looks as though the home manufacturers had determined to fight all the harder for their market, even under the more unfavorable conditions now prevailing.

It will be interesting to see whether they will be successful in meeting the competition of the German made skate.

One thing is admitted, however, and that is that, so far, the German agents are not booking orders at present in such large volume as they did at the same time last summer.

HIDES ARE TOO DEAR.

Toronto dealers in hides and skins have, of late, been expressing great dissatisfaction at the existing high prices they are forced to pay and at the unhealthy condition which at present prevails in the market.

Ever since the rise of a cent in hides of a short time ago, business has not been profitable. Dealers are losing money, for they cannot get $\frac{1}{4}$ c. a pound advance on the prices they are forced to pay. Tanners, too, claim that present prices are too high for the manufacture of leather. In all lines of the trade business is not healthy and is dull.

Easier prices in the near future are expected by those engaged in the trade.

BETTER RATES WANTED.

The Woodstock, N.B., Board of Trade are communicating with the railway authorities and with the Boards of Trade in Montreal and Toronto in regard to having the passenger rates between Woodstock and western points reduced. Now the return rate to Boston is \$18, and return to Montreal is \$26, although Boston is about 30 miles farther away than Montreal.



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SCIENCE AND PAINTS AND COLORS

LOOKING at the use of paints and colors, other than dyes, as the covering of the surface of a solid body with a thin colored coating adhering by a film of drying oil or some similar vehicle, there are at least three important requirements to be considered: the composition of the paint or color itself, its behavior when placed in contact with other colors or with the vehicle employed, and its permanence when exposed to atmospheric or similar influences or merely to the action of time.

The composition of the color scarcely concerns anyone but the manufacturer, and, except in a general way, is for the most part unknown to the user. It is not, indeed, very important to him if he is using the color for ordinary purposes of decoration, or the protection of iron or woodwork from the action of the atmosphere; but in some cases where, for example, it is to be used for the interior of vessels to hold special liquids, or in places where it will be exposed to special influences, a general knowledge at least is important. For example, it must be remembered that lead compounds are attacked by sulphides, ultramarines even by weak acids, prussian blues by alkalis, etc. From the manufacturer's standpoint it is important that his colors should as far as possible have always the same uniform chemical composition, as this will go far to ensure uniform properties and behavior in use. In many cases this means that the color is a definite chemical compound, but in many more that it is a mixture of uniform composition, always consisting of the same substances in the same proportions. Colors belonging to the class of definite chemical compounds are often supplied in the market in a state of really remarkable purity, frequently with much less than 1 per cent. of impurity, and even this for the most part is due to the water used in washing. The washing of colors is very important and should be very effectually done, as the soluble matters to be removed by it are often detrimental to the use of the color, and if left in it to any considerable extent or in very variable proportions will produce perplexing and unpleasant consequences. In some cases, however, as some of the lakes, the color is only insoluble in a saline solution, or not quite so even in that, and is so far soluble in pure water that it cannot be washed to any considerable extent. In such cases the color-maker must do his best to attain the happy mean.

Other colors which are not definite chemical compounds but mixtures should have as far as possible a constant composition, for their physical properties generally depend on this. For example, although the precise constitution of white lead is not certainly

known, it is most likely a mixture of the carbonate and hydrate of lead of a very intimate character, so intimate as to approach the condition of chemical combination. But within certain limits the proportions which these bodies bear to one another may vary, and it is found that the character of the color varies in correspondence. A white lead which approaches near to the composition of carbonate has little body and covering power, while one with less carbonate and a correspondingly larger proportion of hydrate has good body and covering power, and combines well with oil. As other examples may be mentioned chrome yellows, cadmium yellows and brunswick greens, which are of necessity mixtures and which it is of the greatest importance should be kept of a uniform composition. In some cases these mixtures are made in the dry state, but in the great majority they are made while wet, either by mixing the materials in the pulp condition or by precipitating one constituent with another, or by precipitating two or more bodies simultaneously. In this way a much more intimate mixture is obtained, and with less labor. The more intimate the mixture the purer and brighter is the color for the most part, and the greater the difference in color of the components the more essential it is that the mixture should be of the most intimate character. This is strongly shown when greatly differing colors are mixed, as blue and yellow to form green, yellow and red to form orange or black and white to form grey. If the mixture is not of the most intimate nature the result is dull and unpleasing, the eye appearing to be able to appreciate the different colors as still separate. It is a part of the same rule that where—as is sometimes necessary—two shades of the same color are mixed to produce an intermediate shade, the shades to be mixed should be chosen as near to the desired shade as may be, one darker and the other lighter, so that the contrast in the mixture may be as little marked as possible.

The less this contrast the better the result, but, if the shades be far apart, as a rule nothing short of prolonged and vigorous grinding will produce a good result. In the great majority of cases, the finer the state of division of a color the better it is in brightness, power and usefulness as a paint, so that it might be said that color could not be ground too finely. The old farmer's saying, that if you ploughed your land too much you would have no crop, might be parodied in this form: If you grind your color too much you will spoil it! But there is a considerable minority of colors to which this does not apply. For example, crystalline substances, such as emerald green, red chromate of lead, and vermilion, either must not be ground at all or to a limited

extent, with the clear understanding that the shade of the color will change as the grinding proceeds. In such cases the character of the color depends on the precise crystalline condition of the substance; in a general way, the larger the crystals or crystalline masses the deeper the shade of color, so that if these crystals or masses are crushed by grinding the color is changed either gradually, as in the case of vermilion, or in some cases suddenly, even to an extent which may fairly be called destructive. The physical principle here concerned is not far to seek. The colors of amorphous bodies are due to the selective absorption of rays of light of particular refrangibilities on reflection at the surface of the particles, but those of transparent crystalline substances are due partly to this, but also largely to absorption on the transmission of light through the body of the crystals. In the latter case the larger the crystals the greater the degree of absorption on transmission as compared with that on reflection. When these relatively large crystals are broken up by grinding, although the composition, the crystalline form, and in truth the color of the substance remain the same, yet the path of the light rays through the crystals is made shorter, and the surface for reflection is at the same time increased, so that the proportion of selective absorption is reduced—in fact, it is as if the light before it reached the eye was passing through a thinner layer of the same colored medium. In some instances crystals are so large that these changes can be traced with the aid of a simple lens, or the general crystalline texture of the color is manifest to the eye; but in others even the largest crystals, giving the deepest color, are yet so minute that they cannot be separated or even seen to be crystalline, although submitted to a high microscopical power.

In a great many cases substances having the same chemical composition have different physical forms, according to the method of preparation, and they behave to light in ways differing not in degree, but in character. Such are cases where the amorphous form of a substance has a color different from that of the same substance when crystalline. But although the composition is the same, and sometimes one form can be readily converted without gain or loss into the other, and perhaps this change can be as easily reversed, yet it is better from our point of view to consider each form as, in fact, a different substance, the physical constitution, although not the chemical composition, being different. As illustrations of this we may mention the carbonate of copper, which in the amorphous state is green, but may be obtained in the crystalline form as verditer, which is blue; or the hydrate

of copper, which, according to circumstances, may be precipitated as a blue (which, however, is not permanent) or a brownish-black, but can be also obtained as a dark bluish green; or the sulphide of mercury, which in the amorphous form is black, but in the crystalline state is the bright vermillion.

While, if the nature of the color permits, it is desirable that it should be reduced to a very fine state of division, it is also for the most part important that whatever be its degree of fineness this should be uniform. The color is then generally of a brighter and purer tint than if it consists of a mixture of particles, some of which are extremely small, and others relatively much larger, although there may be no other difference. In the case of crystalline bodies, which are really transparent, an irregularity of size of particles will lead to an irregularity of absorption in transmission of light, the larger particles absorbing more than the smaller, and so appearing really of a deeper shade, so that the color, as a whole, will be in effect on account of this variation in texture a mixture of differing shades, and the result will be a flatness or dulness of tint. The foregoing does not relate to particles so large as to be palpable, and generally described as "grit," but to the very considerable difference which may exist in the sizes of particles of powders, even the largest of which would be far too small to be felt or even seen as a separate body.

The importance of having colors as far as possible in a condition of impalpable powder is obvious, since the finer they are the more readily will they mingle with the oil or other vehicle used to constitute "paint," and the more uniform the surface of the coating obtained in use. It is surprising how very small a proportion of "gritty" matter, either coarser particles of the color itself, or of foreign matter, will effectually spoil a sample of color or of paint. An extremely small quantity of "grit," escaping in the grinding, or finding its way into the vessels in the course of manufacture, either from the materials used, or from dust or other extraneous matter, or from carelessness in packing, will do an immense amount of mischief, and cause an article which was otherwise irreproachable to appear harsh and rough to the touch, and when used as paint to produce a coat with abundant obvious blemishes.

The influence of colors on one another when employed, as they so generally are, in mixtures is often of very great importance, and depends on a number of considerations, some of which are sufficiently obvious but others are little understood. If all colors were absolutely insoluble in the vehicle used it is clear that this difficulty would never arise, as no true contact would occur, and

we should only be dealing with mixtures of inert bodies. But solubility and insolubility are, in truth, only relative terms, and there are few substances which even approach nearly to true insolubility either in water or in oil. Moreover, although oil is repellent to water in the fresh state, yet the oxidized compound produced when an oil is "dried" is not so water-resisting, so that after drying the color-constituents of paint are more likely to be subjected to the action of water, and if any of them are soluble in it not only will such be attacked, but others will be subjected to the action of a solution of the soluble matters, which, although weak, may be capable of producing in time very distinct and injurious effects. It is important, therefore, to avoid mixtures of colors if the desired effect can be attained by the use of a single and permanent color, or if a mixture is used to choose colors which cannot by chemical action on each other produce a substance of a different color or colors which, being insoluble in the vehicle, are not likely to act on each other in any way. For example, white lead should not be used with ultramarine, because the latter, containing a readily soluble sulphide, would be apt to produce the black sulphide of lead; but ultramarine could be used with zinc white,

for even if action took place to a certain extent the sulphide of zinc, being also white, would not affect the result. Chrome yellow should not be used with ultramarine, as the black sulphide of lead might be produced, and also part of the ultramarine be destroyed. Cadmium yellow could be used with ultramarine or zinc white or both without danger. There are some colors, however, which are so inert, which practically means insoluble, that there is little or no danger of action between them and others when mixed. Vermilion, oxide of iron, chrome green (oxide of chromium), are among these, and may be used with almost any other substances whatever. Chrome yellow may generally be used in the absence of sulphides, Prussian or Chinese blues in the absence of alkalies, and so on. Enough has been said to illustrate the principles involved, and also to show that the maxim of the artist that colors should be "mixed with brains" applies not only to the producing of the desired tint, but also to the selection of the colors to be mixed in regard to their peaceable character after mixing.

Thomas Conners, a broker, of Paris, Ont., is missing and is "wanted" for about \$4,800. He went to Buffalo last week, and Paris operators, who held sugar, wanted to close out and take the profits, which were about \$3,500.

TRADE...

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MACHINERY AND MECHANICAL DEPARTMENT.

TORONTO'S ROLLER BOAT.

By R. D.

TORONTO is distinguishing itself at present in the marine world by constructing the proposed roller boat now being built at Polson's Iron Works, of that city. This boat is of such a novel type that there is hardly a daily newspaper in the country that has not drawn its readers' at-

ters are to be strongly braced together to form an immense paddle-wheel. On the outside cylinder paddles will be placed, as in ordinary paddle-wheels. On the boat itself, as it stands on Polson's dock, preparations have been made for paddles in the centre only, extending each way for about 10 feet on a string. Mr. F. B. Polson, regarding this matter, said it would be de-

the second and third cylinders and the two outside ones made to revolve at a high velocity by means of a steam engine of 150 horse-power, placed within the third cylinder, which will not rotate. The boat will virtually be a large paddle wheel rolling over the water with the passengers, engines, steering apparatus and cargo, all in the centre of the wheel.

The steering gear will consist of steel plates, on the tee-board principle, and will be suspended by a chain from either end. The power of the engine will be communicated to the outer cylinders by means of friction. The inside cylinder will be open at both ends and the revolving portion of the vessel will slope upwards from the water line, thus obviating any danger of shipping seas. The boat will draw not more than a foot or a foot and a half of water. It is expected to have her ready to be launched some time this month.

If this boat proves successful Mr. George Goodwin and Mr. Knapp propose to build one 750 feet long and 150 feet in diameter, which Mr. Knapp claims could cross the Atlantic ocean in forty-eight hours.

ELECTRICALLY WELDED STEEL BARRELS.

LONDON Engineering describes the method of making welded steel barrels, which is now carried on at Uxbridge, Eng., under the Barrbeat-Stange patents. The body of the barrel is rolled out of steel plate, and buckling is prevented by easing the rolls at the ends. The rolls then bear only on the centre of the sheet passed through them, and thus extend the metal there and there only, the sheet remaining its original length at its two edges. Under these conditions it shapes itself naturally into the barrel form as the rolling proceeds, and when removed only requires its ends sheared straight in a special machine, and to have its longitudinal seam welded. This latter operation is effected electrically by the Bernados process, with which no skilled labor is required. The bent sheet is clamped with its two opposing edges some one-quarter or three-eighths of an inch apart; a small fragment of steel is placed over the opening and melted by means of the electric arc by one man, while another stands by to hammer it as soon as ready. By welding on successive fragments in the manner named, the whole joint is finally completed, and the cask is finished by adding its heads and its bung bosses. The heads are first cut in a circular shearing machine, and then corrugated and dished in a 400-ton hydraulic press. The dished edge fits inside the barrel edge, and a ring of sheet metal three-quarters to one inch wide is also placed round the head of the barrel outside. The three edges of this ring, of the barrel itself, and of the head, are then melted together by the electric arc. The bung bosses are also welded on. These are steel stampings, and being much thicker than the sheet forming the barrel body, it is the practice after the weld is finished to place a heavy mass of hot iron on top of the work until the whole is cooled down.



THE ROLLER BOAT.

tention to it. The Marine Review, of Cleveland, Ohio, one of the leading papers on marine matters, has even found room in its pages for an account of this wonderful boat. The accompanying illustration, which is from a photograph taken about the end of June, gives one a very fair idea of it as it stands on Polson's docks now.

I understand the Polson Iron Works are in no way responsible if the craft should happen to turn out a failure, as they are working to the plans and specifications of a lawyer named F. A. Knapp, who is supposed to be the designer of the craft.

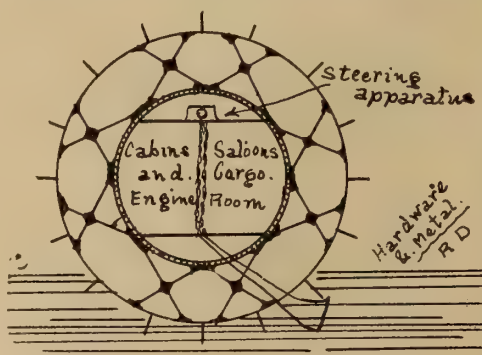
Mr. George Goodwin, of Ottawa, a wealthy Government contractor, after seeing a model work successfully built on Mr. T. A. Knapp's plans, sunk \$10,000 into the affair for its construction on a larger scale, which, as we have just mentioned, is now in progress.

The vessel consists of three large cylinders composed of $\frac{1}{4}$ -inch steel plate, riveted together in the ordinary manner as in other vessels, the outer one of which is 110 feet long by 20 feet in diameter. Within this is a second cylinder of the same length, but only 12 feet in diameter. These two cylin-

cided by experiment where was the best position for the paddle.

My reason for drawing attention to this is because it would be generally supposed from the cuts that were given in the respective papers all showed paddles the entire way down the sides, which would make a large difference in the operation of the boat.

The third cylinder, which will be placed



End View of Roller Boat.

inside the other two, will be but a few inches smaller than the second one. The intention is that ball bearings shall be placed between

H. S. HOWLAND, SONS & CO.

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DEAD SHOT FG. FFG. FFFG.

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IN 25-LB. IRON KEGS.

The sale of this powder during the last thirty years has steadily grown in United States and Canada.



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SMOKELESS

This powder is the best known and has the best reputation of any smokeless powder on the market.

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CARTRIDGE CASES—Eley's, U.M.C. and Dominion

METALLIC CARTRIDGES—U.M.C. and Dominion

LOADED SHELLS—U.M.C. and Dominion.

GUN CAPS and PRIMERS—Eley's, U.M.C. and Dominion

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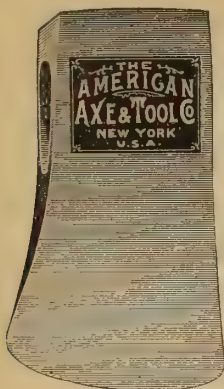
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NEW YORK

Catalogues and Price List on application.

CATALOGUES, BOOKLETS, ETC.

THE M'CLARY MANUFACTURING CO.

THE McClary Manufacturing Co., Limited, London, Ont., have issued their 1897 announcement in the shape of a catalogue and price list. It is called a stove catalogue, but in reality it illustrates nearly every article required by the stove, furnace and tinware trade. Most of the work, however, is composed of cuts, explanations and prices of stoves and ranges, including their latest designs in this line: the steel hotel ranges, "Mars," with double heater, "Famous Prairie." Another new thing is the "Famous" air-tight cast-top. It is a book of 200 pages and is well worth asking for.

THE D. MOORE CO.

The D. Moore Co., Limited, Hamilton, are placing in the hands of their customers their annual catalogue and price list of "Superior" stoves, ranges and hardware lines that they manufacture. In this catalogue they show many new and attractive additions to their large line. It is very neat and the numerous illustrations are good. An application to the firm will procure one.

MARLIN FIRE-ARMS CO.

The Marlin Fire-Arms Co., New Haven, Conn., are issuing a catalogue descriptive of their new goods—1897 Model—including their special light-weight rifles and their 40-

70 in the 1895 Model. It is claimed that this is the first publication to give systematized information regarding rifles, their ammunition and their use. There is so much supplementary information contained in it that it is really a sort of encyclopedia. It contains some 200 pages, is bound in paper, and will be free on application, although the firm say that they think no one will be grudge postage stamps.

PIG IRON PRODUCTION IN 1897.

THE Pittsburg American Manufacturer says: "We estimate the production of pig iron in the United States for the first six months of 1897 at 4,416,747 gross tons." From reports received each month it "estimates the total production of pig iron in the United States for the first six months of 1897 at 4,416,747 tons. According to reports made to the American Iron and Steel Association, the production for the first half of 1896 was 4,976,236. Taking our figures in comparison with those of the authority mentioned, we find that the pig iron production for this year so far is 559,489 tons below that of the first six months in 1896, or a drop of something over 11 per cent. Compared with the output of the last half of 1896, that of the past six months shows an increase of 769,856 tons, or more than 21 per cent. This, however, does not indicate a large production this year, as

there was a great shrinkage in the output during the last six months of 1896. Our estimate of the production by months and fuels used during the first six months of 1897 is as follows:

PRODUCTION OF PIG IRON IN THE UNITED STATES BY MONTHS AND FUELS.				
	Coke.	Char-coal.	Anthracite.	Totals.
January.....	638,507	24,658	86,747	749,952
February.....	583,616	22,012	82,024	687,652
March.....	672,005	23,927	88,753	784,685
April.....	634,239	21,146	88,024	743,409
May.....	646,580	14,017	77,074	738,571
June.....	617,143	15,437	79,898	712,478
Totals.....	3,792,090	121,237	503,420	4,416,747

"The largest coke pig iron production was in the month of March, and the smallest in February. Comparing these two months we find a decrease of more than 15 per cent. In charcoal iron, the first month of the year showed the highest production, and the lowest month, which was May, showed a decrease of more than 32 per cent. The production of anthracite pig has been fairly steady during the past six months, and, compared with the output for the first half of last year, it shows a gain of 66,723 tons. Taking the totals for the last six months we find that the highest production was in March and the lowest in the month previous, showing a drop of 97,033 tons, or more than 13 per cent. As we have stated, the total pig iron production during the past six months has been much larger than that of the last half of 1896. This, of course, has resulted in an increase in stocks."



Steel Enamelled Ware

ESTABLISHED 1860.
INCORPORATED 1895.

"Crescent," "Royal," and White.

GUARANTEED not to Chip or Burn.

The THOS. DAVIDSON MFG. CO. Limited

MONTREAL

CHEMICAL LABORATORY MCGILL UNIVERSITY Faculty of Medicine

MONTREAL, October 14, 1895.

THE THOS. DAVIDSON MFG. CO. Limited, MONTREAL.

DEAR SIRS,—I have examined the two samples of Crescent Steel Enamelled Ware, submitted Sept. 21th. I find the Enamel is not acted upon by organic acids nor by dilute alkalis, either when exposed for days at low temperature or even when heated for several hours in contact with these substances. The enamel itself is of such a nature chemically, that it cannot give up anything at all injurious to food materials cooked in contact with it.

I remain, sincerely yours,
(Signed) R. F. RUTTAN.
Prof. Prac. Chemistry.

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

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Montreal
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and
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Capital, \$2,000,000
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Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
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Chain
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Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

• • • •

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

The OXFORD CHANCELLOR

The Cheapest and Best

WOOD RANGE...

Handsomely Nickered and
Attractive in Appearance.

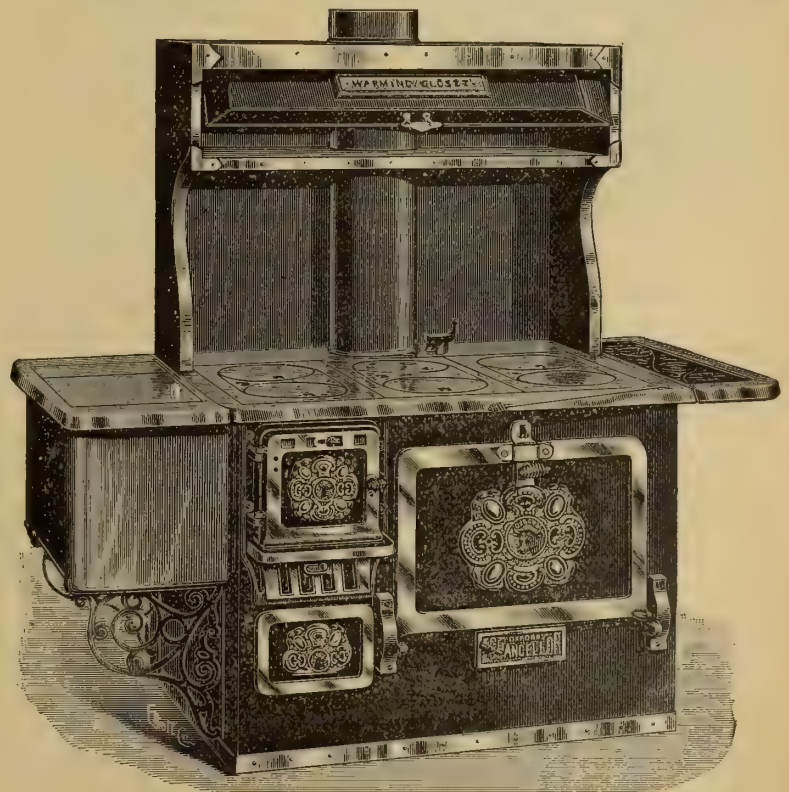
Large Oven
Drop Oven Door
Oven Plates Asbestos Lined
Large Fire Box
Fire Back Extra Heavy
Fire Back in One Piece
Dump Centre Grate
Large Ash Pan
Loose Interchangeable Top

NOTE.—An additional draft slide is placed at top of fire door, and by means of an inside shield the draft is conducted down and introduced at bottom of fire box, controlling the fire, and making THE CHANCELLOR the most economical wood-burner in the market. Reservoir can be attached or detached in five minutes.

CAN BE SUPPLIED WITH COAL FITTINGS.

The Gurney Foundry Co., Limited, Toronto

THE GURNEY-MASSEY CO., Limited, MONTREAL.



Cooking Surface, 39 x 30 in.
Oven, 20 x 22 x 14 in.

Fire Door, 8½ x 7½ in.
Fire Box, 28 in. long.

HANDLING BICYCLES.

THE subject of handling bicycles is of more or less interest to all hardwaremen. It is, therefore, with no apology that we print the following extracts from a paper read before the Michigan Hardware Association the other day :

"Is it not a fact that the wheel has never been handled by the manufacturer and jobber to the interest of the hardware trade, seeking the establishing of a trade that is to be something for a future business—the same, as a matter of comparison, as we take up a line of stoves? Run them, stay by them, sell them. This is the history of the stove business, but it is not so with the bicycle, for we all know that any man, woman or child can send off and buy a wheel as cheap as any of us, and then as a matter of accommodation to us, tell everybody the cost of same. Has this not had much to do with the reduction in price, and is it not a fact that the profit on the wheel business will soon be brought to the level of other goods, and then, in my opinion, is when the hardwaremen will be drummed and bored to death by the manufacturer and jobber to handle their particular line and make, and for an order of from 10 to 50 will give us exclusive sale, and possibly make as low a price to us as they would to the party outside on one wheel.

"I am led to believe that the only way wheels can be handled, and to do it safely, will be with a stock not to exceed five wheels, and this number only in the early season, and then with samples of each kind only on the floor.

"I am looking forward to the time when the exchange business will be done, and it surely will. The exchanging of the coal stove will be no comparison. Even though we oftentimes wonder how some people are able to own a wheel, we will be surprised to find that they will be the first to have the new ones.

"With the decline in price are not these things noticeable: The manufacturers withdrawing their racing teams, cutting down their advertising schemes, and in fact placing everything where the local dealer can do all he cares to, to sell his particular make of wheel, and is it not plain that it has never been in construction that the cost of bicycles was so high; and is it not also a fact that with these high costs removed the manufacturer has still a handsome profit, and what amount of sympathy do they show to the retailer when he is obliged to meet the prices we sometimes have to, of the butcher, the baker, the undertaker? And now the pawnbrokers are entering the field, and this simply means the demoralizing of the bicycle business.

"Now let us, if you please, separate a

bicycle and put it together after this manner: Let us frame our business relations one to another, as our interests are identical, and in such a way as to remember a competitor's welfare as well as our own, and that we will never handle, bar-ring reliable makes, any wheel sold by others than the legitimate trade, and that we will bawl, bearing such information to the people continuing to supply the same, and that we will willingly fork over any reasonable amount to promote this object, and if spoke unto upon this subject, we will not saddle the burden upon our neighbor, but will pedal our own canoe, and let us never tire in well doing, and at the meetings of this association forge a chain never to be broken, and finally, after this life, to have a double front crown and a diamond frame of mind."

GERMAN IRON TRADE.

THE rapid growth of the iron and steel trade of Germany has attracted much attention, and it has one point in common with the like growth in the United States and one point of marked difference. In both countries the growth of the industry is characterized by the increasing output per workman; or, in other words, the diminishing cost of the product in the terms of human labor. There is a marked difference in the greater richness of the ores in this country. If we compare the consumption of ore with the production of pig in our country we shall find year after year that less than two tons of ore make one ton of pig; in 1891 it was 1.9, and in 1896 it was 1.8. There is the further advantage in this country that the ore that is leanest, that in the south, is nearest to limestone and coal, and makes even cheaper pig iron than the richer ores that run 62 and 64 per cent. of iron. In Germany, however, it takes over two tons of ore to make a ton of pig; in 1886 it took 2.4 tons, and in 1895 2.26 tons.

From 1886 to 1895 the production of iron ore in Germany increased nearly 50 per cent. The number of persons employed rose till 1889, and after that declined, so that comparing the first year with the last the numbers were nearly unchanged. The average output per worker increased from 264 to 368 tons; the product per worker increased 40 per cent. The production of pig iron has increased from 3,528,000 tons to 5,464,000 tons, with a small increase in the number of workmen, the product per capita increasing from 164.32 to 227.1 tons.

Manufactured iron has fallen off about one-fourth in Germany, but this is on account of the increasing use of steel due to its cheapening. The quantity of steel produced increased nearly three-fold from 1886 to 1895, and in the last year fell but little below 4,000,000 tons. The number of men employed increased largely, and the average product per workman rose from 40.37 to 52.75 tons. The increased product here is about 30 per cent.

If the Germans are somewhat apt to borrow mechanical improvements from the United States and England, they in turn depend largely on her for advances in chemistry. The rapid growth in the past twenty years of German manufacturing is attributable in great measure to the presence in Germany of a great number of extremely well trained chemists, and to the thoroughness with which Germans apply science to industry. The German does not invent so rapidly as the American, but he is more painstaking, and he carries his exhaustive natural science into every industrial pursuit.—N.Y. Journal of Commerce.

TRAVELING CASE FOR MR. M'MICHAEL.

ON Saturday morning the office staff and travelers of the James Robertson Co., Limited, of Toronto, assembled in the plumbing sample room of the firm, when one of their number, Mr. A. W. Mann, invited Mr. P. McMichael to join them.

Mr. McMichael was not a little surprised to find himself surrounded by the entire staff, which surprise was increased when Mr. Mann, in an able manner, addressed him in the following words:

"We learn with much regret that you are about to sever your connection with our branch of the firm, yet while feeling we will greatly miss your kindly presence, we are convinced the new position of trust and responsibility you are to occupy will be filled with that marked diligence, ability and success that has ever been so characteristic of yourself. Therefore we take this opportunity of congratulating you on your well merited promotion to the management of the St. John branch of this firm, and would ask you to accept this traveling case as a slight token of the deep and sincere regard we have always entertained towards you during the many long years you have been associated with the Toronto house. And now, on behalf of my associates, I wish you and yours many years of health and happiness."

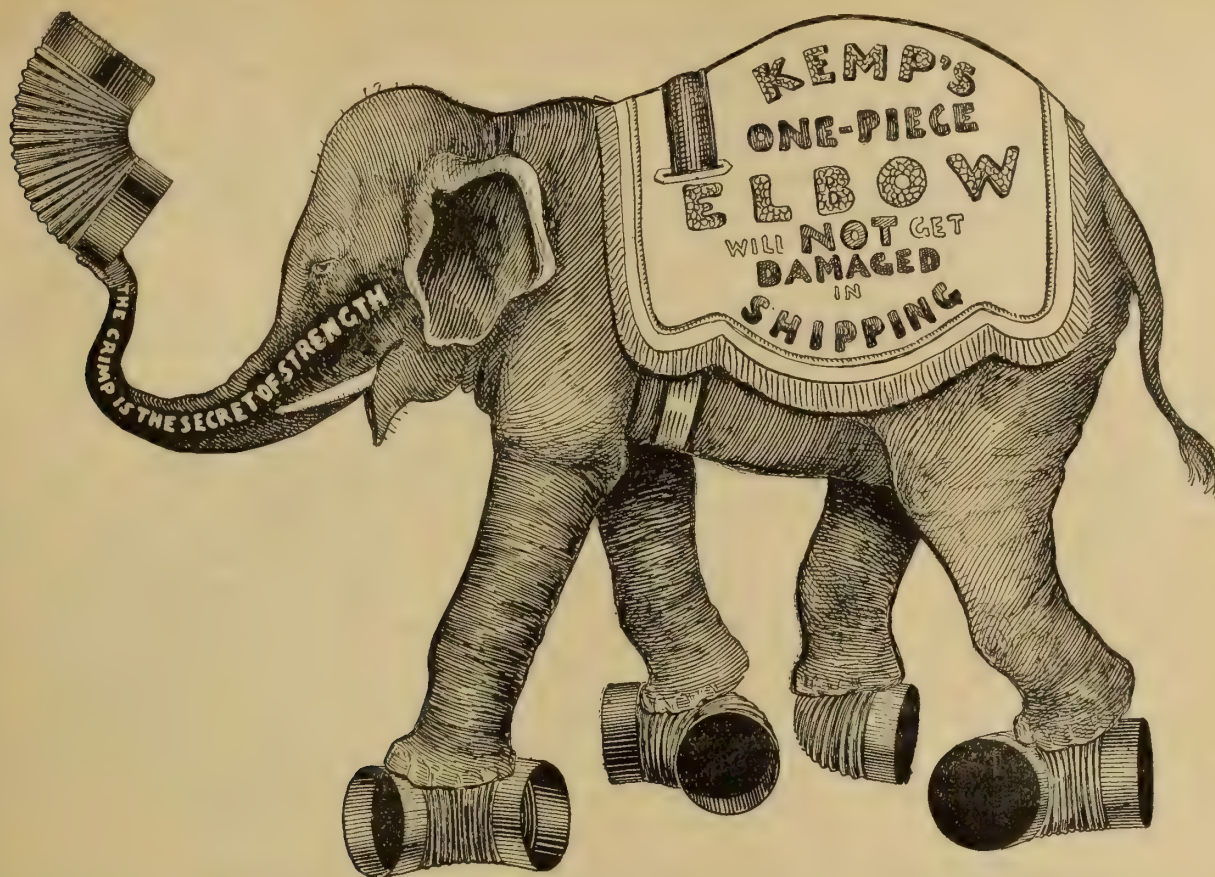
Mr. McMichael expressed his surprise and heartfelt thanks in well chosen words, after which the staff sang the ever popular chorus, "For He's a Jolly Good Fellow," and the meeting dispersed.

WIRE NAILS

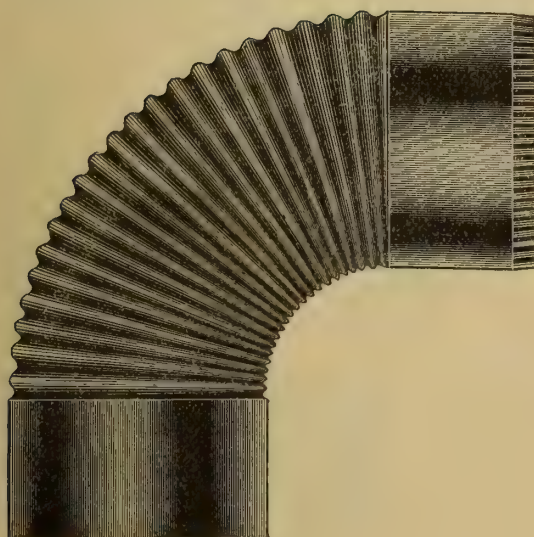
WIRE - TACKS

Ontario Tack Co.

HAMILTON



MADE IN TWO QUALITIES



No. 1

Is made of extra heavy smooth iron, with long ends.

The elbow has a most attractive appearance.

The design of the crimp is the secret of its strength.

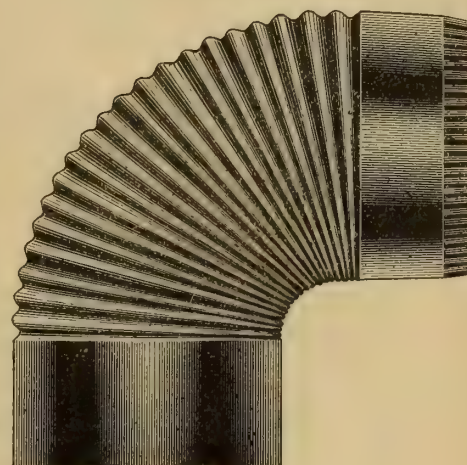
It will not get damaged in shipping.

It can be bought as cheap as the ordinary pieced elbow.

It is rivetted, ready for use.

It has a coating which prevents rust.

It is in every respect what the trade demands.



No. 2

Is made of ordinary iron, with half-inch shorter ends.

The improved process of manufacture produces a short turn, therefore less material is used and consequently less weight per dozen, WHICH RESULTS IN A GREAT REDUCTION IN FREIGHT, AND A REDUCED COST TO THE BUYER

Kemp Manufacturing Co., Toronto

TRADE CHAT.

LAST week the Standard Oil warehouses, Winnipeg, situated at the end of Logan Ave., were totally destroyed by fire. Estimated loss is 25,000. No insurance.

Lately, further samples of the Sudbury coal have been tested and have shown a decided improvement over previous specimens. At every foot that the shaft deepens the carbon increases, and experts are firm in their belief that pure anthracite will soon be obtainable.

The Canadian Pacific Railway has let a contract for the construction of a concrete bottom in the cattle yards on Wellington street, Chatham. It will have a top dressing of cement and with water connections and a proper system of sewerage will be kept perfectly clean.

Notice was posted lately on the "Bulletin Board" of the McClary Manufacturing Co.'s Works, announcing that Mr. Joseph Nicholson, foreman of the tin department, had been appointed superintendent of the tin, stamping, re-tinning, galvanizing, janning, enamelling and machine shops.

The Delaware and Mount Brydges Oil and Gas Co., Limited, will continue operations at Mount Brydges where a locality has been selected. A private syndicate will this week commence to drill on the Munn property, about 100 feet east and south of the old oil well which was put down 31 years ago.

The repair shops of the M. C. R., St. Thomas, were nearly the scene of a fatality one afternoon last week about 3 o'clock. John Beal was repairing a jack and was filling the piston with air when it burst, felling him to the floor and inflicting a gash in the back of his head about three inches long and through the scalp and skull.

The Stevens Lumber Co. wish to sell their mill on Salmon River in the parish of Drummond. The first electric plant that ever was put into use in Victoria County has lately been placed in this mill. Owing to their large business at Fort Fairfield, Me., they wish to dispose of this other property. Laths and shingles are manufactured and exported, and about 90 men are employed.

U.S. CUTLERY TARIFF.

A commercial paper, referring to the cutlery schedule of the Dingley tariff, says: "It means the total prohibition of the importation of pocket cutlery in competition with American goods. We will all have to buy American made knives at high prices. . . . True, a 25-cent knife may only have one blade where before it had two, but what's an old knife blade compared to a

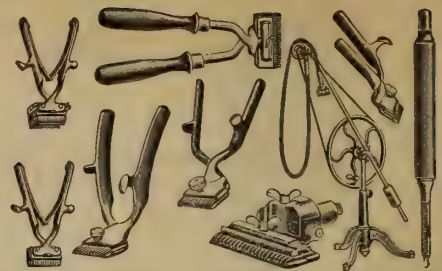
boom at the cutlery shop? Stand by home industries and home people against the world! Keep out the foreigners at no matter what cost!"

A HINT TO PAINT MAKERS.

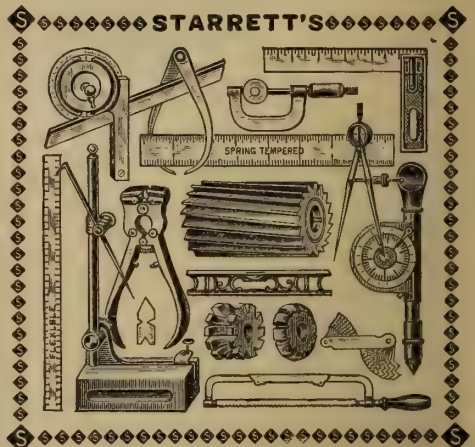
It is doubtful whether color and paint manufacturers understand at its full the important part that women take in selecting colors, and it is certain that it would prove of advantage to many of them if they were to give consideration to the subject, and endeavor to turn it to account in their own business. Men as a class are debarred almost entirely from the use of color in their dress, and hence any natural ability that they may possess in the selection and harmony of colors has never had the chance of development. With women, however, the case is entirely different. Their selection of colors for dress is an absolute necessity, and it is probably not too much to assert that at least nine out of ten are able to produce harmonious contrasts with facility. Those who make colors for wall paper manufacturers understand these facts perhaps a little better than ordinary paint manufacturers, because the wall paper maker insists upon certain tones that the house painter and decorator does not seem to require at all. The question arises, says Oils, Colors and Drysalteries, whether those who make enamels and other similar goods would not do well to add each season a few new shades, with the object of following up this idea. No better plan could be adopted than studying the pattern cards issued by the various firms who manufacture dyes. There are 156 different colors shown, some of them very beautiful, and they are arranged in a manner that is very convenient for reference. Many of the colors might easily be made in enamels, and would be fairly certain to prove successful. When a lady has inspected new shades, has admired some of them, and has finally selected one for her new dress, it is not at all unlikely that she will be favorably impressed with, not necessarily the same, color, but one in the same line that possesses novelty, when selecting her wall paper and the tints her room is to be decorated in.

A BARBED WIRE SCHEME.

The barbed wire manufacturers of the United States are already struggling in competition with one another over the Canadian trade that is expected to fall into their grasp after January 1, 1898. Many representatives are here looking for orders, and schemes are numerous. One factory has arranged to send over about fifteen carloads of wire this fall and will thus have to pay only the summer freight rates. The wire will be left in bond till January 1, when it can be taken out free.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.



FINE TOOLS

98 Page Catalogue Free.

THE L. S. STARRETT CO. Box 5
ATHOL, MASS., U.S.A.



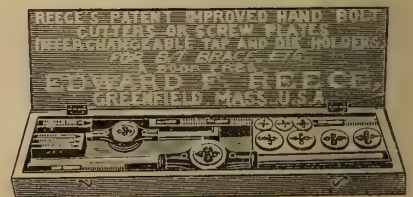
COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.



PERSONS addressing American advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS

PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

Canada Plates

Half Bright, 52 Sheets.

All Bright Russia Finish, 52 Sheets.

Ordinary, 60 and 75 Sheets.

.. WRITE FOR PRICES ..

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

Eddy's Fire Pail



Never mislaid---the careless employee can't use it for ordinary purposes---it won't stand alone---"for fire only"---it's of no use for anything else.

The round bottom does it.

The E. B. EDDY CO. Limited

HULL

MONTREAL

TORONTO

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Aug. 6, 1897.

HARDWARE.

SOME shrinkage in the volume of trade in hardware is usually expected in midsummer, but though this is the case, there is still a fair movement in progress. Barb and plain wire continue quiet and featureless, while wire nails have furnished some fair orders. Cut nails are slack but unchanged, and the same can be said of horseshoes, though there is a fair demand for horse nails. Screws, bolts and rivets are less active than they were a week ago. Cordage is in fair enquiry, and other branches of hardware furnish nothing particular. Cement has been more active, especially on western account, several round contracts being put through since last report.

BARBED WIRE—There is very little doing in barbed wire, and we quote, as before, \$2.20 to \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—Without change, demand ruling quiet, with discounts 30 and 5 off, f.o.b. Montreal.

WIRE NAILS—There have been fair orders for wire nails noted during the week. Values are unchanged on the basis of \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS—Small lots have been asked for and the base price remains at \$1.85, f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Meet a moderate enquiry with discounts unchanged at 50 per cent.

HORSESHOES—Business rather quiet this week. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—Are less active than they were. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Quiet and steady at 12½ per cent.

BOLTS—Demand while still fair is not as extensive as it was. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—Rivets are governed by much the same conditions as bolts. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—The demand for cordage continues fair. We quote as follows: Sisal, 7-16 and upwards, 5¾c.; ¾, 6¾c.; 5-16 and ¼, 6¾c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7¾c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—Continue quiet, with discounts, 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—Business in these remains much the same, and we quote \$28 to \$31.50, as to brand.

ICE CREAM FREEZERS—Remain much as they were last week.

HARVEST TOOLS—Demand still remains of fair volume for harvesting tools.

SPADES AND SHOVELS—A quiet, steady business is passing.

FILES—Remain steady under a fair enquiry. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

BUILDING PAPER—There has been little change in this line in the eastern markets. We quote: Plain building, 30c.; tarred lining, 40c., and do. roofing, \$1.40.

LEATHER BELTING—There has been a fair enquiry for leather belting. We quote: Standard, 45, 10, 10 and 10 per cent.;

extra, 40, 10 and 10 per cent.; agricultural, 65 per cent.

HINGES—There is a fair demand for these. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WARE—There has been a moderate enquiry for granite ware in a sorting way.

CUTLERY—Both table and pocket cutlery have been enquired for to a fair extent.

SPORTING GOODS—Demand has been picking up for ammunition during the week, and guns and rifles are asked for quite freely.

SHOT—Quite active and steady. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

WIRE CLOTH, ETC.—Trade is steady in wire cloth at \$1.35, while screen doors and blinds are less active.

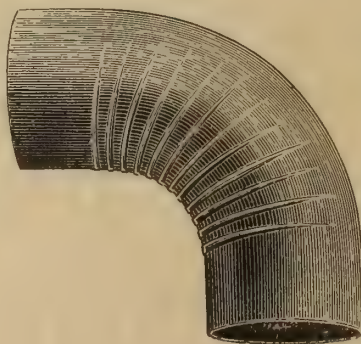
CEMENT—A more active business has been reported during the past week, especially on western account, and several large contracts have been put through, including 1,500 barrels Belgian. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2 per bbl, ex wharf.

FIREBRICKS—There has been a good enquiry for firebricks, and prices rule steady at \$16 to \$21 per 1,000, as to brand.

METALS.

There was no change in heavy iron or metals this week, but the scarcity of many staple lines, such as galvanized iron, tin and

ELBOWS . . .



Do not place your orders for elbows thinking we cannot supply as cheaply as others. We are in a position to sell any style of elbow at the same prices as others, and . . .

We Will Guarantee Prices

3 Styles { 1 Piece, Heavy, 5, 6 and 7 inch.
1 " Light, 6 " 7 "
4 Pieces, Heavy, 5, 6 " 7 "

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST
AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosse, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

**The Wightman
Sporting Goods Co.**

403 St. Paul St.

MONTREAL

terne plates, etc., etc., continues as marked as ever.

PIG IRON—Foundrymen and buyers generally are well supplied with pig iron for the time being and business is quiet. We quote: Hamilton, \$15.50 to \$16 for No. 1, and \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrson, No. 1, \$17; Eglington, \$17; and Carnbro', \$16.50.

BAR IRON—Business is quiet and values are still largely in buyers' favor. We quote \$1.35 to \$1.40, but this range would certainly be shaded for a round lot.

BAND IRON—Business dull at \$1.65.

HOOP IRON—Without feature at \$2.25.

SHEET STEEL—A fair trade is passing with the basis of value unchanged from \$2.35.

SHEET IRON—Jobbers are still lightly supplied with the heavier gauges. Values show no change from \$2.25.

GALVANIZED IRON—Stocks of galvanized iron are still far from being well assorted. We quote "Queen's Head" and "Morewood" at \$4.25 to \$4.30.

TINNED IRON—Without new feature, the base price being unchanged at \$5.50 up to 20 gauge.

LEAD PIPE—There has been some enquiry for lead pipe, but only in a small way. We quote 7 to 7½ c., with 30 and 5 off.

PIG LEAD—The firm feeling in pig lead is fully maintained, and though round lots have been moved for less money, we quote the range steady at \$3.40 to \$3.50.

INGOT TIN—Aside from a few peddling orders there has not been a single transaction of any importance put through in tin for weeks. We quote prices steady at 16 to 16½ c.

INGOT COPPER—Without change, at 12 to 12½ c.

SHEET COPPER—As last reported, at 16c.

IRON PIPE—Demand has been quieter in this line during the past week. We quote per 100 feet net: Wrought, ¼ to ¾-inch, \$1.87; ½-inch, \$2.13 to \$2.25; ¾-inch, \$2.63 to \$2.75; 1-inch, \$3.55 to \$3.65; 1¼-inch, \$4.36 to \$4.75; 1½-inch, \$6 to \$6.12½; 2-inch, \$8.12½ to \$8.25; Galvanized, ½-inch, 4c.; ¾-inch, 4¾ c.; 1-inch, 6¾ c.; 1¼-inch, 10¼ c. 1½-inch, 11½ c.

CANADA PLATES—There is a fair enquiry for these, while jobbers have some difficulty in attending to all the orders owing to light stocks. Prices rule steady at \$2.25 to \$2.30.

TIN PLATES—Demand fairly active and supplies light. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—Orders are still filled

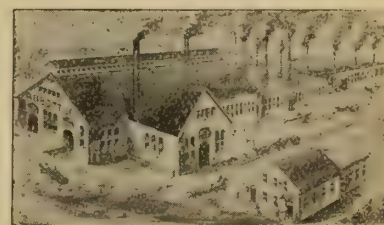
Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



AND FACTORIES
MONTREAL

Rhode Island Pattern Horseshoes.

Correct Shape. Quality Guaranteed.

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION
HAMMOCK MANUFACTURING CO., Paris, Ont.

with difficulty, and prices are held firm at \$6.25.

BOILER PLATE—Steady and unchanged at \$1.90 to \$2.

SOLDER—A few small lots are moving at 12c.

SPELTER—Continues as before at \$4.50 to \$4.75.

ANTIMONY—Unchanged at 9½ to 10c.

SHEET ZINC—We quote 5¼ to 5½c. in a jobbing way, but this would be shaded for round lots.

SCRAP IRON—There is little doing in scrap as the rolling mill people are well supplied. We quote No. 1, \$12, and No. 2, \$6 to \$7.

PAINTS, OILS, ETC.

Business in paints and oils is now in the midsummer dull season and there is little to report. Linseed oil rules firm abroad and lead also continues strong in England. Paris green is not as active as it was, while turpentine continues strong, advancing 3c.

WHITE LEAD—Quiet. Government standard, \$5; No. 1, \$4.62½; No. 2, \$4.25; dry white, \$4.50.

RED LEAD—Firm, at 4c. in casks and 4½c. in kegs.

LIQUID PAINTS—Demand good and prices steady.

SHELLAC—Quiet at 25c.

PARIS GREEN—Less active than it was. Drums, 13½c.; packets, 14½c.

LINSEED OIL—Firm, but unchanged. Raw, 41c.; boiled, 44c.; 5-bbl. lots, 1c. less.

TURPENTINE—Firmer, having advanced to 45c. in single bbls. with larger lots 44c.

VARNISHES—Unchanged.

SEAL OIL—A few lots have been moving at 42 to 44c.

COD OIL—Dull, at 31c.

NAVAL STORES—There is no material change in this line. We quote as follows: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c½, for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There has been a fairly active jobbing trade in window glass during the past week. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

There is no change in ashes. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

A more active trade is reported in heavy chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda,

60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Lambskins and clips have advanced 10 to 35c. each. Beef hides are steady at 8c. for No. 1, 7c. for No. 2, and 6c. for No. 3.

PETROLEUM.

The only change in petroleum has been a decline of ½c. in American. We quote: Canadian, in car lots, 13½c.; smaller quantities, 14½c.; American prime white, car lots, 16½c.; smaller, 17c.; water white, car lots, 18c.; smaller, 19c.; Pratt's astral, car lots, 20c., and smaller, 21c.

COAL.

Quiet and steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Turpentine has advanced 3c. per gallon over the prices ruling at this time last week.

American petroleum has been marked down ½c. per gallon on all grades this week.

A scarcity of the heavier gauges of black sheet iron still continues a feature of the local situation.

Mr. Thomas H. Newman, of Caverhill, Learmont & Co., is enjoying a short holiday on the Maine coast.

Lamplough & McNaughton report an active demand for meat choppers from the jobbing trade at present.

Jobbers still report that orders for tin, terne and Canada plates are being filled with difficulty, owing to light stocks.

ONTARIO MARKETS.

TORONTO, Aug. 6, 1897.

HARDWARE.

WHILE orders are coming in freely, the quantities wanted are not as large as they were during the past few weeks. This, of course, is to be expected during August. The falling off is

principally in harvest tools. Tinware is another line which also appears to be less wanted. Sporting goods and cutlery are beginning to move nicely. Trade is a little better in cut nails, but the volume of business is still light. Horse nails are meeting with a good demand, and a little more business is being done in horseshoes. Bolts, rivets and burrs are still going out well. For rope the demand is better than a week ago. The only noticeable change is an advance of 10 per cent. in the price of such handles as those for hay forks, picks, axes, rakes, hoes, hammers, the discount now being 45 per cent. instead of 50 per cent., as formerly. Payments are rather slow, as is usual at harvest time.

BARB WIRE—There is practically nothing doing. We quote: \$2.20 f.o.b. Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—There is very little doing. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE.—Nothing doing. Discount, 30 per cent.

WIRE NAILS—Orders are not coming in very rapidly just now. Prices are still open. When quoting freight classification must always be consulted. The ruling idea as to base price is \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—Trade is a little better, although it is still quiet. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—The demand is good. Discount, 50 per cent.

HORSESHOES—Business has increased during the week, quite a number of orders having been received. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Business continues good. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10;

Binder Twine.

HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH
CENTRAL PRISON
CONTINENTAL TWINE CO.'S
DOMINION GOVERNMENT

TWINES

A LEAF FROM OUR CATALOGUE.



FIG. 550.

GEO. W. GOVINLOCK,
Architect.

THE "TEMPLE BUILDING," TORONTO

10 Stories High.

THE HOME OF THE "INDEPENDENT ORDER OF FORESTERS."

Considered to be the best and most fire-proof office building in Canada. Finished throughout with our Pressed Fire-Proof Doors, Jambs, Casings, Wainscoting and "Hayes" Patent Steel Lathing. Over \$40,000.00 worth of our goods used in this building.

The Metallic Roofing Co. of Canada Limited, Toronto

THE PIONEER MAKERS OF SHEET METAL BUILDING MATERIALS.

flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Business is quiet. Discounts are 12½ per cent.

BOLTS—Trade is still active. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ⅝, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ⅝ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—Are going out freely. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Demand is active. Discounts are 17½ per cent.

ROPE—An improved demand, principally for the larger sizes, has developed during the week. We quote: Sisal, 7-16 in. and larger, 5½c.; ¾ in., 5½c.; ¼ and 5-16 in., 6½c.; 3-16 in., 7½c. Manilla, 7-16 in. and larger, 7½c.; ¾ in., 7½c.; ¼ and 5-16 in., 8½c.; 3-16 in., 8½c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Not much doing. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Trade is quiet. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—While orders are still coming in freely, they are only for small quantities, except for cradles, the demand for which still exceeds the supply. Discount, 60 and 10 per cent.

SPADES AND SHOVELS—Business is moderate. Discount, 45 and 2½ per cent.

BUILDING PAPER—The improvement noted last week appears to have been maintained. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—Business keeps fair. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—A good many orders are coming

STANDARD of
AMERICA
for
30 Years



**NICHOLSON
FILE CO.**
Providence, R.I., U.S.A.
Largest Producers in the World.



Guaranteed to be the Best Preservative of Metals. Not Vaseline. Will retain its form in any climate. Not affected by heat or cold. Will NOT grow RANCID. Least required to coat work thoroughly. Use it to protect your tools. Largest Tube and Best Quality. A Superior Lubricant for Bicycle Chains and Metals. Write regarding this or the best Repeating Rifles to

THE MARLIN FIRE ARMS CO., New Haven, Conn., U.S.A.



To Whet a Scythe...

properly requires a good
Scythe Stone.

**Pike's BLACK DIAMOND
WHITE MOUNTAIN and
INDIAN POND**

are positively **Scythe Stones**
the best on earth.

Pike's Lily White Washita OIL-STONE
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

in for tinware, but the quantities wanted are not as large as they were. Granite ware is still brisk in some lines.

HINGES—Trade is being well maintained. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CUTLERY—Trade is improving. Early fall orders are coming in and the demand is fairly active.

SPORTING GOODS—Trade is opening up nicely. A good demand is reported for shot guns and ammunition, and there is a little doing in rifles.

POULTRY NETTING—Quiet and featureless. Discount, 67½ per cent.

GREEN WIRE CLOTH—Trade is steady. We quote \$1.35 per 100 square feet.

GARDEN HOSE—A fair quantity is going out. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—Trade has again improved, and the slack demand has been shown to be only a temporary falling off. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The metal trade remains steady, but devoid of any special features.

PIG IRON—A few enquiries are reported, but no transactions are heard of. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75 for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—Very little doing. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—Business is quiet. We quote \$2.20 per 100 lbs.

SHEET STEEL—Business has improved. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—An increased trade is also reported in this line. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to

\$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade is keeping up nicely. Quite a number of shipments of case lots have been made from stock, and import orders have been freely booked. We quote: Queen's Head (case lots), 16 gauge, 3½c.; 18 to 24, \$3.87½c.; 26, 4½c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅛ to ¼c. per lb. higher than figures named.

TINNED IRON—Business is quiet. We quote as follows: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6⅞ to 7⅞c. per lb.

LEAD PIPE AND TRAPS—Trade keeps steady. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—The demand is fair. Discount, 60 and 10 per cent.

PIG LEAD—Very few large orders are reported and trade generally is quiet. We quote ton lots at 3½c. per lb., and in smaller quantities at 3⅞c. per lb.

INGOT TIN—While quite a number of small shipments have been made, the volume of business is not as large as it was. We quote 16¼ to 16½c.

INGOT COPPER—Very quiet indeed. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER, Very little doing. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—A few large orders have been received, but the buying is not so free as it was before the recent advance. We quote net: Wrought, ¼ to ¾ inch, 1⅞c.; ½ inch, 2⅞c.; ¾ inch, 2⅞c.; 1 inch, 3.55c.; 1¼ inch, 4.58c.; 1½ inch, 6c.; 2 inch, 8⅞c.; galvanized, discount 60 per cent.

RANGE BOILERS—Business continues moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50;

copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Shipments from stock are about the same as a week ago, but import orders are coming in more freely. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$2.85.

TIN PLATES—Trade is fair. The demand is principally for 20 x 28 gauge. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Orders are coming in a little better than they have been for some time. We quote: ¼ in., 4⅞c.; ⅜ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade is fair and prices unchanged. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

TERNE PLATES—A slight improvement is to be noted, but orders are not large. We quote: I C, \$6.25 to \$6.50; I X, \$8.

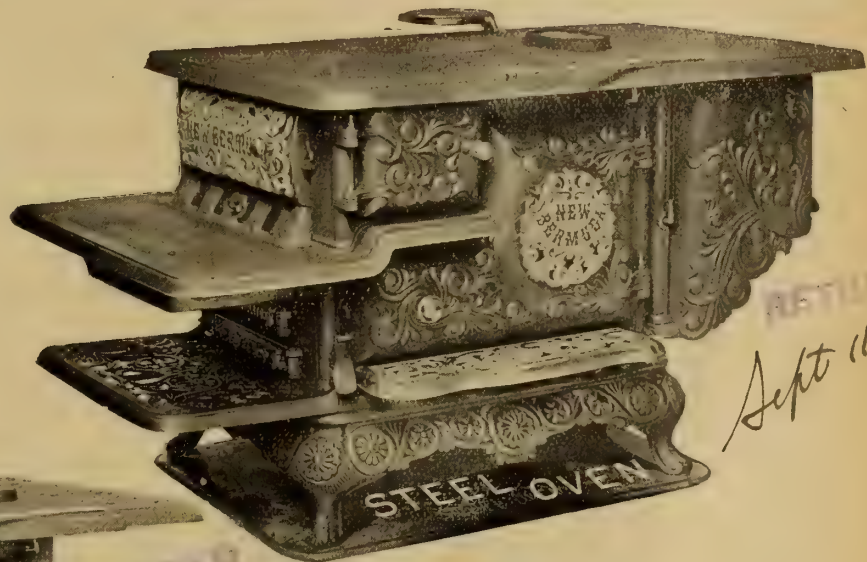
SOLDER—Trade is still fair. We quote: Standard, 10½c.; strictly pure, 11c.

ANTIMONY—A slight improvement is

The ... New Bermuda

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



No. 9-26 Square and Reservoir
Takes 28-inch Wood.

The NEW BERMUDA possesses many features of utility and convenience not found in other Wood Cooks. Sold by all Stove Dealers.

Manufactured by...

The D. MOORE CO. Limited
HAMILTON, CANADA

again to be noted, although orders are still small. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

OLD MATERIAL.

The condition of the iron trade is about the same as it was a week ago. Dealers continue to hope for a good fall business. Some wrought was shipped to Montreal. The rag trade has now also received a shock from which it will not recover for some time. Lead is attracting a good deal of attention and much speculation is going on. The rise in spelter continues in the United States. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb.; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

In this line trade has shown a slight improvement during the week. It is in slightly better demand all through, and numerous enquiries are coming forward for plate. The Belgium market is strong, and, owing to a further advance there of 10 per cent. this week, local dealers have found it necessary to mark up their figures. We quote window glass: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

The quiet season in this trade has made itself more apparent during the week. Whatever orders are now coming in are general. The Paris green trade has practically ceased. The prices in linseed oil have been lowered 1c. per gallon during the week. At the present time, however, the cost of English oil laid down in Toronto in carload lots is $40\frac{1}{2}$ c. Consequently quotations are firm. Owing to the rise of turpentine in the south, the price here has been advanced 2c.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.15; No. 1, \$4.77½; No. 2, \$4.40; No. 3, \$4.02½; No. 4, \$3.65; dry white lead in casks, \$4.50.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—\$1.90 per barrel.

CASTOR OIL—In cases, 9c. per lb. and 10c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

PARIS GREEN—Kegs, 13c.; drums, 13½c.; 1-lb. cartoons, 14c.; ½-lb. packages, 16c.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 41c.; boiled, 1 to 4 barrels, 44c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

COAL.

Business is much about the same as it was a week ago. There is not much going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

HIDES, SKINS AND WOOL.

HIDES—Trade is quite brisk. Cowhides: Dealers pay $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3. Steerhides: 60 lbs. and up, $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3.

CALFSKINS—Trade is brisk and prices are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 50c.

WOOL—The fact that there is hardly any wool coming forward is enough in itself to keep up the price. Dealers predict that as soon as trade picks up the price of wool can do nothing but drop. Price now is 19 to 20c.

PETROLEUM, ETC.

Lubricating oils are moving out lively, and illuminating oils are dull. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, $14\frac{1}{2}$ c.; carbon, safety, $16\frac{1}{2}$ c.; Canadian water white, 17c.; American water white, $17\frac{1}{2}$ c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

A new steel horseshoe is being put upon the market to meet United States competition.

A large trade is expected this season in hay-baling wire, and manufacturers are getting ready for it.

The demand for "Dead Shot" powder is reported by H. S. Howland, Sons & Co. to be opening up well.

Handles of hay forks, picks, axes, hoes, hammers, etc., have been advanced 10 per cent., the discount now being 45 per cent.

Mr. E. Fielding has been advised of an advance of 10 per cent. in the price of window glass in Belgium and local dealers have marked their figures up.

H. S. Howland, Sons & Co.'s travelers are all taking their usual summer vacation, except the Northwest representative of the firm, who is now looking up business on the Coast.

Local jobbers have reduced their price of both linseed oil and turpentine about 1c. per gallon. Linseed oil, is however, dearer in England and would cost about $40\frac{1}{2}$ c. laid down in Toronto in carload lots.

The Toronto Brass Co., Limited, 88 York street, Toronto, say that the damage occasioned by the fire at their factory last Sunday morning will in no way interfere with their business. Every department is now running full blast, and they are filling orders promptly.

NEWLY INCORPORATED.

The John Dwyer Gold Mining Co., of Toronto, Limited, has obtained a charter.

The Canadian Calcium Carbide Co., Limited, Montreal, is to apply for incorporation.

The Metal Shingle and Siding Co., of Preston, Ont., Limited, has obtained a charter.

The Romaine Automatic Agricultural Machine Co., Limited, have obtained a charter.

The Latimer Carriage and Implement Co., Limited, have obtained a charter of incorporation.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.

Cable "LeVesconte" Toronto.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

THE MAN AND THE OPPORTUNITY.

HE who improves an opportunity sows a seed which will yield fruit in opportunity for himself and others. Everyone who has labored honestly in the past has aided to place knowledge and comfort within the reach of a constantly increasing number.

Avenues greater in number, wider in extent, easier of access than ever before existed, stand open to the sober, frugal, energetic and able mechanic, to the educated youth, to the office boy and to the clerk—avenues through which they can reap greater successes than ever before within the reach of these classes within the history of the world. A little while ago there were only three or four professions—now there are fifty. And of trades, where there was one there are a hundred now.

"Opportunity has hair in front," says a Latin author; "behind she is bald. If you seize her by the forelock you may hold her, but if suffered to escape not Jupiter himself can catch her again."

But what is the best opportunity to him who cannot or will not use it?

"It was my lot," said a shipmaster, "to fall in with the ill-fated steamer Central America. The night was closing in, the sea rolling high, but I hailed the crippled steamer and asked if they needed help. 'I'm in a sinking condition,' cried Captain Herndon. 'Had you not better send your passengers on board directly?' I asked. 'Will you not lay by me until morning?' replied Captain Herndon. 'I will try,' I answered; 'but had you not better send your passengers on board now?' 'Lay by me till morning,' again shouted Captain Herndon.

"I tried to lay by him, but at night, such was the heavy roll of the sea, I could not keep my position, and I never saw the steamer again. In an hour and a half after the captain said 'Lay by me till morning,' his vessel, with its living freight, went down. The captain and crew and most of the passengers found a grave in the deep."

Captain Herndon appreciated the value of the opportunity he had neglected when it was beyond his reach, but of what avail was the bitterness of his self-reproach when his last moments came? How many lives were sacrificed to his unintelligent hopefulness and indecision? Like him the feeble, the sluggish and the purposeless too often see no meaning in the happiest occasions, until too late they learn the old lesson that the mill can never grind with the water which has passed.

Such people are always a little too late or a little too early in everything they attempt. "They have three hands apiece," said John B. Gough; "a right hand, a left hand and a little behind-hand." As boys they

were late at school and unpunctual in their home duties. That is the way the habit is acquired; and now, when responsibility claims them, they think that if they had only gone yesterday they would have obtained the situation, or they can probably get one to-morrow. They remember plenty of chances to make money, or know how to make it some other time than now; they see how to improve themselves or help others in the future, but perceive no opportunity in the present. They are always at the pool, but somehow when the angel troubles the water there is no one to put them in. They cannot seize their opportunity.—Pushing to the Front.

MESABA ORES.

FURNACE practices with ores from the Mesaba range seem quite as far from uniformity, or from any approximate agreement as to the most advantageous percentage, as in either of the two preceding years in which the use of these ores has been general. The fact that 75 per cent. of Mesaba ores has been used for a short time in the furnaces of one interest has not established any such basis for practice, either in the case cited or at other furnaces. With some furnacemen, indeed, there is less inclination to-day to use liberal percentages of Mesaba ores than in preceding years, when the conditions of the problem were presumably less understood. Perhaps one factor in the diverse reports concerning these ores has not been allowed as far as it should be, and that is the difference in Mesaba ores themselves. It has been customary to refer to these ores as a class, as though they were of substantially the same fineness, and therefore involved the same possibilities of trouble from flue dust, hangs, and top explosions. As a matter of fact, there are wide variations in these ores. Some of them, for example, are so fine that four times as much of a typical sample passes through a 100-mesh sieve as of other ores that have the lumpy characteristic that commends them to the furnacemen. It is thus likely that what has been known as the "Mesaba differential" will itself be differentiated, as more thorough acquaintance with the various ores of the range makes it possible to determine the place of each. Those that have physical characteristics putting them on a par with well-known old range ores will stand close to the price of the latter; those that by reason of their exceeding fineness cannot be used in as large percentages in the furnaces will naturally fall still lower in price. It would not be surprising to find the market designations of the near future, "Mesaba ores, coarse," and "Mesaba ores, fine," or, if not an actual division into classes, a discrimination by buyers that will make the physical characteristics an important element in determining the percentages that can be used, and, therefore, the price that should be paid.—Iron Ore.

MANGANESE BRONZE.

THE following is from a paper read before the American Foundrymen's Association: In much of the manganese bronze used by foundrymen in this country the manganese is added in the shape of ferro-manganese, which necessarily introduces considerable iron into the bronze. There is no doubt that this iron is injurious, and that the bronze so made is much more readily corroded and not nearly so strong, tough, and ductile as bronze that does not contain iron. A rich alloy of manganese and copper, containing no iron or other impurities, is now on the market, and by using this alloy a very pure manganese bronze of any desired grade can be produced. One of the best and cheapest bronzes can be made after the following formula:

	Per cent.
Copper.....	53.00
Zinc.....	42.00
Manganese.....	3.75
Aluminum.....	1.25

This makes a very strong, tough metal, suitable for propeller wheels, gears and pinions, mining machinery, etc. As the bronze contains no iron, a much greater quantity of zinc can be added than when ferro-manganese is used without danger of making the metal brittle. In the above mixture it is quite important that the aluminum be present, as without it difficulty will be experienced in obtaining solid castings; in fact, it is necessary to add a small amount of aluminum to all the manganese bronzes, as without it they will not cast solid; but no trouble is experienced in obtaining solid castings when a small amount is used. Manganese bronze in the form of sheets is used quite extensively for mining screens, as the acid mine waters have no action on it. For rolling into sheets a mixture containing more copper and manganese and less zinc is used.

A substitute for German silver can be made by the use of manganese, the different metals and their proportions being as follows:

	Per cent.
Copper.....	67.25
Manganese.....	18.50
Zinc.....	13.00
Aluminum.....	1.26

The color of this metal is very good, resembling German silver closely. It is fully as strong as the best German silver, and has superior casting qualities, which will be appreciated by foundrymen who have experienced some of the difficulties in casting German silver. It does not corrode as readily as either German or nickel silver.

PERSONAL MENTION.

Mr. Robert Wilson, of Reid & Wilson, Seaforth, was in Toronto this week.

Mr. Steedman, manager of the Gurney Scale Co., Limited, of Hamilton, was in Toronto on Thursday.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

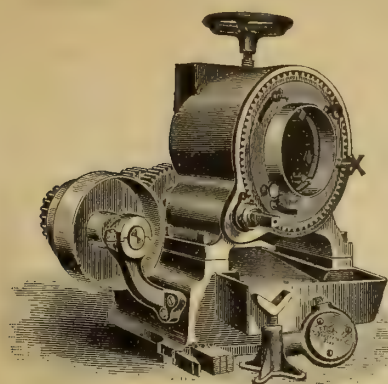
OUR HAND MACHINES are the only portable hand machines in the market with which **one** man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

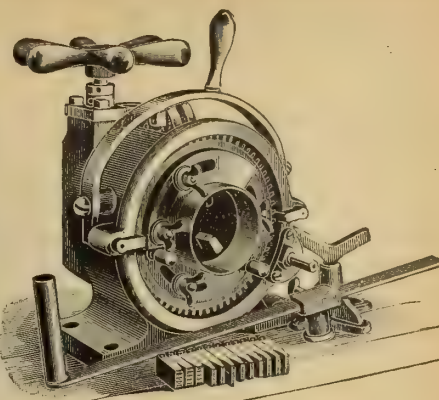
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.



Made only by the very best makers.

Full line carried in stock. Low prices. Prices quoted on application.

BRASS GOODS

... FOR ...

Steam-Fitters, Plumbers, etc.

MECHANICS SUPPLY CO., 96 St. Peter St., QUEBEC

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

**SMALL
RUBBER
GOODS**

BOILER GASKETS

**MOULDED
RUBBER
GOODS**

H. O. CANFIELD - BRIDGEPORT, CT.

PLUMBING NOTES.

Purdy, Mansell & Mashinter have the contract for the heating and ventilating of the House of Industry being built at Fergus.

Hector Daze and Jos. Daze have formed a partnership in St. Louis de Mile End, Que., to trade as plumbers, under the style of Daze Freres.

The Keith & Fitzsimons Co., Limited, have the contract for the steam-heating of the Central Public School, Collingwood, Ont., and have just shipped a carload of fittings thither.

We have heard of several heads of firms as being out of town this week on the search for jobs. As yet no results of these mis-

sions are open for publication, but word is being daily awaited in regard to final arrangements for several large jobs.

During the week nothing of interest has occurred in the plumbing trade; in fact, business has been rather dull. Not many contracts have been let, although tenders are still frequently asked for. Small jobs, however, are keeping the plumbers busily engaged.

CANNOT BE A PLUMBER.

A decision handed down from the Supreme Court of Georgia in reference to an injunction secured by a plumber against the city of Waycross for going into the gen-

eral plumbing business is as follows: The court contends that while the city had a right to perform such acts as might be imperative to protect its water-works system, it had no right to enter into competition with a private individual in such work as is ordinarily left to private individuals, and should not have accepted plumbing contracts, furnished plumbing supplies and entered into a regular plumbing business. Several decisions bearing on the subject were cited in support of the decision.

Mr. Robt. H. Shaw, the manager of The Standard Fuel Co., Toronto Junction, is dead.

MANITOBA MARKETS

WINNIPEG, Aug. 6, 1897.

THE chief trade just now is in agricultural machinery, and some very good sales are reported. Up to this week the business has been chiefly in mowers and rakes, but binders are now selling freely. Particularly good sales are reported from the Portage la Prairie and Carberry Fairs, and it is expected that a much larger sale will result from the Brandon Fair now in progress. One agent in the country has reported the sale of 30 binders already; this is in a section where the crop is very heavy. In the C.P.R. shops business is very brisk for the construction west. Paints and oils have also been a brisk trade this past week. As intimated some time ago, there is a big thing on in elevators. One firm, a new one, is constructing fifteen elevators this season, and it is currently reported that the number will be made up to 100 next year. This and construction west has tended to make the trade in lumber very active. Prices for the week are as follows:

TIN—Lamb and Flag, 55 and 28 lb. ingots, per lb., 19 to 20c.

TIN PLATES—Charcoal plates, I. C., 10 x 14, 12 x 12 and 14 x 20, \$4.50 to \$4.75; I.X., same size box, \$5.75 to \$6; I.C. charcoal, 20 x 28, 112 sheets to box, \$8.50 to \$9; I.X., box 20 x 28, 112 sheets, \$10.50 to \$11.

TERNE PLATES—I.C., 20 x 28, \$8.50 to \$9.

IRON AND STEEL—Bar iron, 100 lbs., base price, \$2.15; band iron, 100 lbs.; \$2.65 to \$2.75; Swedish iron, 100 lbs., \$5.25 to \$6; sleigh shoe steel, \$3 to \$3.25; best cast tool steel, lb., 9 to 11c.; Russian sheet, lb., 12 to 13c.

SHEET IRON—10 to 20 gauge, \$3; 22 to 24 and 26 gauge, \$3.25; 28 gauge, \$3.50.

CANADA PLATES—Garth and Blaina, \$3.15.

GALVANIZED IRON—American, 20 gauge, \$4; 22 and 24 gauge, \$4.25; 26 gauge, \$4.50; 28 gauge, \$4.75 100 lbs.

IRON PIPE—Is quoted as follows per 100 feet: ¼-inch, \$2.50; ⅜-inch, \$2.75; ½-inch, \$3; ¾-inch, \$4; 1-inch, \$5; 1¼-inch, \$7; 1½-inch, \$8.50; 2-inch, \$11.50.

LEAD—Pig, per lb., 4½c.

SHEET ZINC—In casks, \$5.75, broken lots, \$6.

SOLDER—Half-and-half (guar.) per lb.; 14 to 16c.

AMMUNITION—Cartridges, rim fire pistol, American, discount 40 per cent.; rim fire cartridges, Dominion, 50 and 5; rim fire military, American, net list; central fire pistol and rifle, American, 12 per cent.; central fire cartridge, Dominion, 30 per cent.; shot shells, 12 gauge, \$6 to \$7.50; shot, Canadian, soft, 5½c.; shot, Canadian,

Emery and Hardware Specialties

COOKE HARDWARE CO.

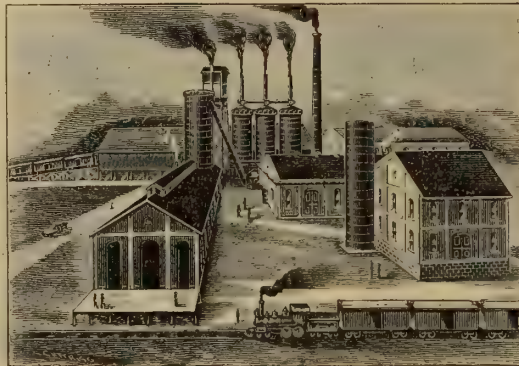
HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.



CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of **10 cents**

HARDWARE AND METAL, Toronto

The Hamilton Blast Furnace Co., Ltd.

HAMILTON, Canada.

Manufacturers of

HIGH GRADE
PIG IRON.

chilled, 6c. Robin Hood powder, 17-lb. kegs, \$10; ¼ kegs, 4¼ lbs., \$3; canister, 9-oz., 60c. Loaded shells, 12 gauge, soft shot, \$18 per 1,000; No. 10 gauge, \$20.70 per 1,000.

WIRE—Galvanized barb wire, \$2.65 to \$2.85 100 lbs.; plain wire and staples, \$2.75 to \$2.80.

ROPE—Sisal, lb., 6¼ to 6½c. base; manilla, lb., 7¾ to 8c. base; cotton, ¼ to ½ inch and larger, 16c. lb.

AXES—Per box, \$6 to \$9.

NAILS—Cut, keg, base price, \$2.50 for 20 to 60d., with new classification of extras; common steel wire nails, 4½ to 6 inch, \$2.65 per keg, with usual extras for smaller sizes.

HORSE NAILS—Pointed and finished oval heads. List price as follows: No. 5, \$7.50 box; No. 6, \$6.75 box; No. 7, \$6 box; No. 8, \$5.75 box; Nos. 9, 10 and 11, \$5.50 box. Discount off above list price 45 per cent.

PAINTS, OILS AND VARNISHES.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, 5½c.; yellow ochre, in barrel lots, 2½c.; less than barrels, 3c.; golden ochre, barrels, 3½c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, 3½c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, 2½c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, 4½c. per lb.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown japan, \$1; house-painters' gold size, japan, \$1.50; coach painters' do., \$2 to \$2.25; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

SUNDRIES—Glue, S. S., in sheets, per lb., 12½ to 15c.; glue, white, for kalsomin-ing, 16 to 25c.; stove gasoline, per case, \$4; benzine, per case, \$4. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$7. Portland cement, per barrel, \$4 to \$4.25; plaster, per barrel, \$3.25; plasterers' hair, P.P., 90c. per bale. Putty, in bladders, barrel lots, 2½c. per lb.; do., in 100 lb. kegs, 2¾c.; do., less than barrels, per lb., 3c. Alabastine, cases of 20 pkgs., \$6.50 to \$7.50, as to color.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

LINSEED OIL—Raw, gal., 50c.; boiled, gal., 53c. in barrels; less than barrels, 5c. gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, 55c.; less than barrels, gallon, 58c. An additional charge for packages for small quantities.

OILS—Range about as follows: Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 11c. per lb.; tanners' or harness oil, 65c.; neatsfoot oil, \$1; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

REFINED PETROLEUM—Prices here are as follows: Silver Star, 18½c.; Crescent, 22½c.; oleophene, 23½c. in barrels. Car lots, 1c. per gal. less. United States oils in barrels are quoted at 27c. for eocene and 24c. for sunlight.

Binder Twine

Pure Manila

650 ft. to the lb.



**BLUE RIBBON
BLUE CROWN
STANDARD**

**RED CAP
RED CROWN
WHITE SISAL**

For the Season of 1897 we shall manufacture our well-known brands from the finest selected marks of Manila and Sisal Hemp, and in evenness and number of feet to the pound they will be found far superior to any manufactured. Between two and three thousand tons of prison-made twine is now on the market. This twine is the accumulation of several years' manufacture. Prices and samples of our brands will be furnished on application.



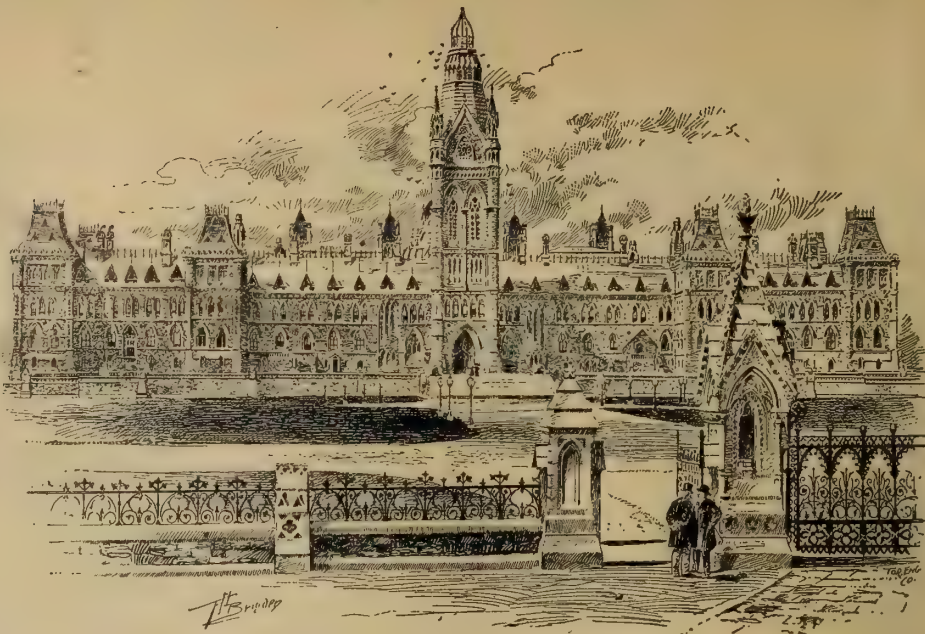
Consumers
Cordage Co.

MONTREAL . . .

STALACTITIC TANNING.

ABOUT twelve months ago, not far from Streitberg, in Bavaria, during a search for minerals in ground containing stalactites, a number of skins were found which must have lain buried in the soil some thousands of years. Nothing can, of course, be ascertained as to how the skins came there, but it is more than probable that the place in which they were found was in olden times a stalactite cave, and it might have been the intention of the people dwelling near to prepare the skins for clothing. The skins were entrusted to a tanner in the neighborhood of Streitberg, who informed us in confidence of what had been discovered, and submitted one of the skins for our inspection, on the understanding that the matter should be kept secret for a time. The skins had evidently been tanned by a most peculiar process. They possessed the softness and toughness of mineral (chrome) leather, were wonderfully elastic, and on attempts to dye them being made it turned out that they were capable of receiving the finest tints. But in the dyeing process a very striking peculiarity manifested itself. On the grain surface of the skins appeared a strange kind of marking, such as is seen in the case of stalactites in the stalactite cave. It was essentially a mineral tannage, the effect, partially, of calcareous spar, and partially of aragonite. The tanner who had the custody of the skins immediately commenced a series of experiments with other skins, with the view of manufacturing leather on a large scale in a similar way. The abundance of stalactites in the neighborhood of Streitberg afforded him every opportunity of carrying out his experiments. After several failures he has now met with perfect success, and we have seen several hundred skins of this new stalactite leather, the peculiar marking and coloring of which appear to make it eminently adapted for a variety of purposes, such as upholstering work, carpets, portfolio leather, dress shoes, etc. A number of experts and capitalists have interested themselves in this novelty, and as the judgment pronounced upon it is unanimously favorable, and a great future is foreseen for it, a company with abundant capital is being formed to work it, to be called the "Stalactite Leather Company," having its seat at Frankfort-on-the-Main.

The announcement respecting stalactite leather made in our last week's number has deservedly attracted a great deal of attention, and quite a flood of enquiries has been received by us in consequence. The execution of the stalactite tanning process is, however, an unsolvable riddle for many practical people. One of the best authorities writes us that it will be impossible to carry it out without warmth as an accessory,



New Customs Tariff

Alphabetically arranged and revised and corrected from the official copy as assented to by the Governor General, June 29, 1897, including the old Tariff by way of comparison.

Also comparative rates of the Dingley and Wilson (United States) Tariffs.

PRICE 25 CENTS.

The MacLean Publishing Co. Limited

TORONTO or MONTREAL.

**Painters
Save Money**

**You
Make Money**

A mutual gain all round—a double profit. And besides this, you gain the confidence of Painters who trade with you, when you sell them

**Boeckh's Flat
Bridled Brush.**

It saves time because it covers most surface. It does better, cleaner work because it can't bulge in the centre. Good-bye to the twine or wire bound brush after a painter once uses Boeckh's Flat Bridled Brush.

Chas. Boeckh & Sons, Mfrs.
Toronto.

and we are inclined to think he is right. The new company mentioned last week has, it now appears, even before it has definitely seen the light, found a competitor. We learn from Bielefeld that a "First German Stalactite Leather Company" has been formed in Delbruck. Another innovation to be worked by the syndicate is a preparation of "Polar Leather Grease." Arctic explorers have often noticed that the polar snow is soft and greasy to the touch. The reason for this is to be sought in the fact that the fatty exhalations from the carcasses of seals, fish, etc., which come to their end in immense numbers every year in the Arctic regions, form a chemical combination with the snow in the upper regions, and in this state of combination return again to the earth. From this snow, by means of a peculiar process, is produced the polar leather grease, the properties of which far transcend those of degreas or fish oil. The difficulties in the way of erecting works in the Arctic regions for the manufacture of this grease are naturally too great to be attempted, and therefore the raw material—the polar snow—will have to be brought here, and this is the first problem to be solved in connection with this matter. In order, therefore, to afford time for a solution of this problem, the definite constitution of the new company has been postponed to the 1st of April next year.—Kuhlow's German Trade Review.

HE GAVE IT UP.

"Do you make keys here?" asked the woman as she entered a locksmith's shop.

"Yes'm."

"Well, I want one."

"What sort of a key, ma'am?"

"One for the front door."

"Have you a duplicate?"

"No."

"Bring the lock?"

"No."

"What sort of a key is it?"

"I—I don't remember."

"But how am I to guess? There are about 40,000 different kinds of keys."

"H'm. I didn't know that."

"Is it a night key?"

"Yes, yes. That's it. It's a night key."

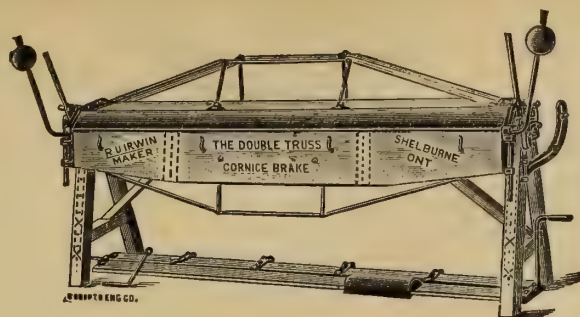
"But that's also very indefinite."

"Well, my husband sometimes comes home at midnight and unlocks the door with his pocket knife or button hook or anything else that comes handy, and you ought to know about what sort of a key would fit such a lock."

He studied over it a while, but finally had to admit that he was up a tree.—Detroit Free Press.

NOVEL HARDWARE DISPLAY.

A very novel window display was recently made by a western hardware concern. The following sign was printed on a large blackboard with the articles themselves taking the place of words in quotations: "A few 'plane' words of advice, 'Brace' up, 'file' in and 'nail' our snap bargains. We want 'awl' to know that you never 'saw' any 'grater' bargains in our 'line,' for our 'rule' is to 'hammer' our prices down to hard 'pan' and divide with you, and we don't 'monkey' a 'bit.' Do you 'catch' on?"



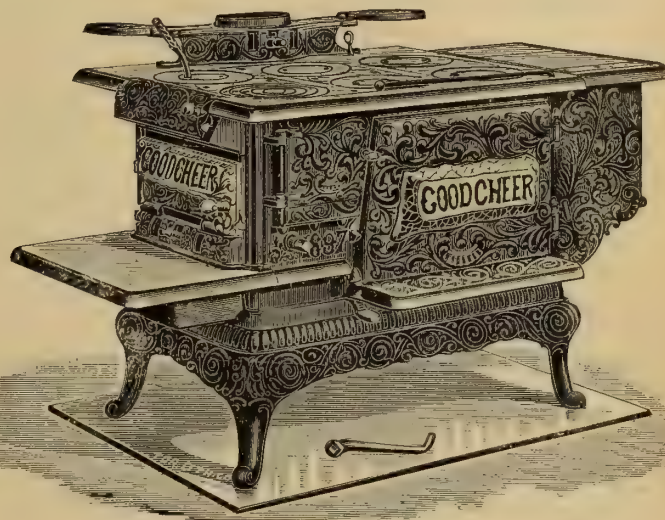
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each—Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

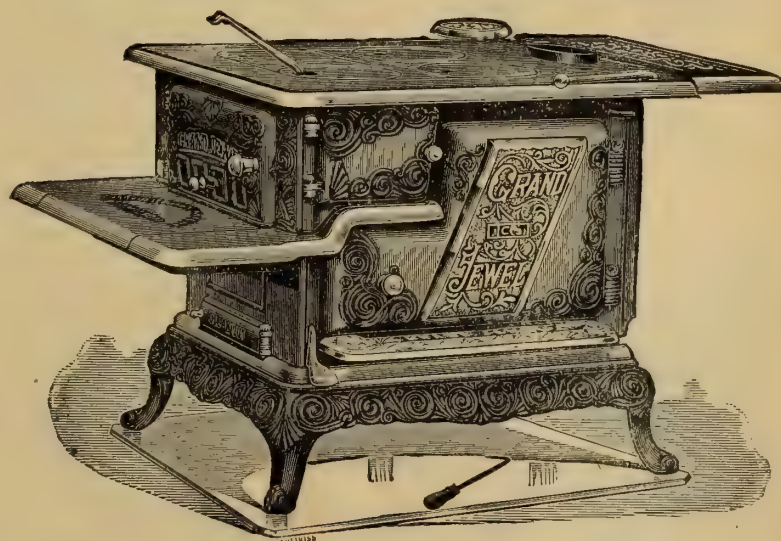
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With
Patent
One-piece
Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son,
MONTREAL

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

MontrealAll kinds of Scales
made and repaired.

Write for Catalogue.



If you want the straightest and
most durable **Rawhide Whips**
in the market, order our

Napoleon and Monarch
WHIPS

Every Whip Guaranteed.

Patented and made only by . . .

HAMILTON WHIP CO.

119, 121, 123 Mary St., HAMILTON.

Cheap Whips of Every Style.

PORTLAND**CEMENTS**

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices.

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

THE OAKVILLE
BASKET CO.,



Manufacturers of

1, 2, 3 Bushel

Grain

AND

Root**BASKETS**

THE OAKVILLE
BASKET CO.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

An assignment has been demanded of
E. C. Matthews & Co., dealers in
bicycles, Montreal.

Allan P. Boag, of the Wroxeter (Ont.)
foundry, has assigned to Joseph Cowan.

J. T. Jewell, harness merchant, Sturgeon
Falls, Ont., has assigned to H. E. McKee.

Thomas W. Sims, harness merchant,
Dresden, Ont., has assigned to Arthur
Smith.

R. M. Foran, general merchant, Inker-
man, N.B., is offering to compromise at
25 per cent.

An execution has been issued against
Laing & Meharry, hardware merchants,
Port Perry, Ont.

Robert Forsythe, of marble and granite
works, Montreal, is offering to compromise
at 25c. on the dollar.

A meeting of creditors of Alexandre &
Lefebvre, bicycle repairers, Montreal, has
been held. They have assigned.

PARTNERSHIPS FORMED AND DISSOLVED.

McNeil & McKinnon, general merchants,
Little Glace Bay, Que., have dissolved.

Blitch & Florence, dealers in scrap iron,
etc., Hamilton, have dissolved. Abraham
Florence continues.

The firm of J. S. Reaume & Co., general
merchants, McGregor, Ont., has been dis-
solved. J. S. Reaume continues.

A. H. Cummings & Son, sash and door
manufacturers, Coaticook, Que., have dis-
solved. Amos H. Cummings continues,
with style unchanged.

S. Lemire and Zotique Hamel have
formed a partnership in St. Jean des Chail-
lons, Que., to conduct a general store under
style of G. S. Lemire & Co.

Ludger Desilets, sr., and Ludger Desilets,
jr., have formed a partnership in St. Syl-
vere, Que., to run a lumber mill under the
style of Ludger Desilets & Fils.

George Woodhouse, jr., and J. E. Mc-
Diarmid have formed a partnership in
Montreal to trade as manufacturers' agents
under the style Woodhouse & McDiarmid.

A dissolution of partnership has been
registered in connection with the firm of
Madden & Ellis, coal merchants, Quebec.
George and Martin Madden have formed a
new partnership to trade as Madden & Son.

Heath, Strachan & Co., general mer-
chants, Huntsville, Ont., have dissolved
partnership. Albert Heath retires. Style
will now be Heath & Strachan, Harry Heath
and W. B. Strachan having become part-
ners.

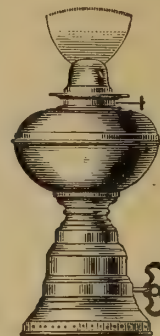
SALES MADE AND PENDING.

The estate of Cutler Bros., manufacturers
of bicycles, Toronto, has been sold.

The plant and stock of the estate of the
New Barnes Cycle Co., Limited, Wood-

Dominion Flint Paper Co.

Hamilton, Ont.

Supplying the Canadian Wholesale Trade with
Flint or Sand Papers.

WANZER.

IMPROVED
WANZER

LAMP AND OVEN

Best Light **Non-Explosive**
Roasts **Broils**
Bakes **Steams**
without impairing the light.

Several hours Lighting and Cook-
ing for one cent. We want to reach
the public through the trade.
Liberal discounts. For prices and
information write The

WANZER LAMP & MFG. CO.
HAMILTON.

E. T. WRIGHT & CO.Manufacturers
of...

Tubular and
Cold Blast
Lanterns

Bird Cages
Mouse Traps
Flour Sifters

Stamped
Re-tinned
and Japanned

..TINWARE



HAMILTON - CANADA.

**"It's the Wick
Does the Trick"**

Wolff-American
High Art Cycles.

Have
Self-
Oiling
Bearings.

REQUIRE NO ATTENTION. HOLLOW
AXLE CONTAINS WICK HOLDING ENOUGH
OIL FOR 1,500 MILES OF RIDING.

DORKEN BROS. & CO.

MONTREAL.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, **payable strictly in advance.** Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means; that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

stock, Ont., have been advertised for sale by tender.

The hardware stock of A. P. Beaudette, Quebec, has been sold at 85c. on the dollar.

The assets of P. Donnelly, planing mill proprietor, Montreal, are to be sold by auction on the 11th prox.

The general stock of J. E. Lessard, East Broughton, Que., has been sold at 40c. on the dollar.

CHANGES.

Wm. Randall, blacksmith, Victoria, B.C., has sold out to Frank Porter.

Jos. St. Galais, blacksmith, St. Jerome, Que., is adding dress goods.

Robertson & Steurol, tinsmiths, Trail, B.C., are reporting closing in this place.

James Emerson, blacksmith, Valentia, Ont., has been succeeded by C. Crozier.

Fred C. Alley, saw mill proprietor, Victoria, B.C., has been succeeded by W. J. Cline.

H. T. Bragdon & Co., hardware merchants, Trail, B.C., are removing to New Denver.

Alphonse O. Very is registered proprietor of the Warwick Cycle Manufacturing Co., Montreal.

Charles J. Robertson, Montreal, has commenced a business in printers' machinery and supplies.

Marie Louise Canadian, dit St. Amour, is registered proprietress of the hardware business carried on by St. Amour & Cie, Montreal.

L. A. Brochu, St. Isidor (Dorchester), Que., has purchased the bankrupt general stock of J. E. Lessard, East Broughton, at 41c. on the dollar.

DEATHS.

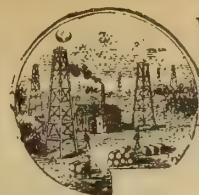
George Herbert, painter, Harvey Station, N.B., is dead.

John Sedingham, founder, St. John's, Nfld., is dead.

Malcolm McNeil, blacksmith, Reserve Mines, N.S., is dead.

LOOSENING OF NUTS.

Regardless of the care usually taken to prevent nuts from working loose on machinery, there is always more or less trouble in this direction, says Commercial Bulletin. It is the same in all machinery. The constant jar of the electric motor, the motion of the balance wheel of the engine, the movement of the planer or drill, all tend to work upon nuts, and in time will loosen them, unless they are firmly set or held in position by mechanical means. The ways resorted to for the sake of overcoming the evils which arise from nuts working loose are many. Some men wind a piece of twine around the thread of the bolt or stud, and the increased tightness resulting will aid in making the nut hold fast. Others have gone so far as to head up a nut on a bolt. This is an effective way, but not mechanical. Two nuts, one binding against the other, is a fair way to assure tightness; lock nuts, patented devices, etc., all come in.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for...

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Ltd.

ADVERTISING DEPARTMENT

MONTREAL - - - TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works

Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelities, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
HESPELER, ONT.**

Wads.—Baldwin

Best thick white felt wadding, in ½ lb bags.....

Best thick brown or grey felt wads, in ½ lb. bags.....

Best thick white card wads, in boxes of 500 each, 12 and smaller gauges

Best thick white card wads, in boxes of 500 each, 10 gauge.....

Best thick white card wads, in boxes of 500 each, 8 gauge.....

Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....

Thin card wads, in boxes of 1,000 each, 10 gauge.....

Thin card wads, in boxes of 1,000 each 8 gauge.....

Chemically prepared black edge grey cloth wads, in boxes of 250 each—

11 and smaller gauge.....

9 and 10 gauges.....

7 and 8 gauges.....

5 and 6 gauges.....

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge.....

9 and 10 gauges.....

7 and 8 gauges.....

5 and 6 gauges.....

Anvils.

Per lb.....

Anvil and Vice combined, each.....

Wilkinson & Co.'s Anvils, .lb.....

Wilkinson & Co.'s Vices, .lb.....

Augers.

Gilmour's, discount 65 p.c. off revised list.

Hollow Stearn's, per dozen.....

Adjustable Stearn's, each.....

Post-hole, Vaughan's, each.....

Excelsior, Jennings', discount 50 per cent.

Awls.

Sewing, per gross.....

Pegging, ".....

Brad, ".....

" handled, per gross.....

Saddler's, per gross.....

Awl Hafts.

Patent Peg, oss.....

" Sewing, per gross..

Awl and Tool Sets.

Millar's Falls, per doz.....

AXES.

Splitting Axes.....

Chopping Axes.....

Black Prince.....

Forest Clipper.....

Lance.....

Mann's.....

Maple Leaf.....

Hand Made.....

Climax.....

Phantom.....

Axle Grease.

Per gross.....

Bath Tubs.

Zinc, discount.....

Copper, discount, 40 and 10 p.c. off revised list

Steel clad, 20 per cent. discount.

Boxing extra

Bells.

Hand.

Door.

Gon Sargent's.....

" Peterboro', discount 50 per cent.

Cow.

American make, discount 66½ per cent.

Canadian, discount 45 and 50 per cent.

Farm.

American, each.....

House.

American, per lb.....

Bellows.

Hand, per doz.....

Moulders', per doz.....

Blacksmiths', discount 60 per cent.

Belting.

Extra, 40 and 10 per cent.

No. 1, leather, discount 60 per cent.

Standard, 55 per cent.

Agricultural, 65 and 5 p.c.

Bench Stops.

Per doz.....

Bits.

Auger.

Gilmour's, discount 65 and 5 per cent.

Excelsior, discount 60 per cent.

Rockford Common, 65 to 65 and 5 per cent.

" Perfection, 50 and 10 per cent.

Jennings' Gen., net list to 5 p.c. discount.

Car.

Gilmour's, 47½ to 50 per cent.

Expansive.

Clark's, per cent.

Excelsior, 10 per cent.

Gimlet.

Clark's, per doz.....

Diamond, Shell, per doz.....

Nail and Spike per gross.....

Blind Rollers.

Annex, per doz.....

Mascott, ".....

Erminie, ".....

Blind and Bed Staples.

sizes, per lb.....

Bolts.

Carriage, dis., 70 p. c. off new list

Tire, dis., 70 and 5 per cent.

Stove dis., 70 per cent.

Elevator, dis., ¾ to 40 per cent

Machine, dis., 70 p.c.

Coach Screws, dis. 80 p.c.

Boring Machines.

Complete, with augers, each..

Braces.

Barbers.....

Barber's Ratchet.....

Farmers.....

llar's Falls.....

Brackets.

Shelf.

Japanned Canadian, per doz.

pairs.....

Berlin Bronze Canadian.....

Broilers.

Light, dis. 65 to 67½ per cent.

Reversible, dis. 65 to 67½ per cent.

Vegetable, per doz., dis. 37½ per cent.

Henis, No. 8, ".....

Henis, No. 9, ".....

Queen City.....

Butchers' Cleavers.

From 8 to ch, per doz.....

Butts.

Brass.

Wrought Brass, dis., 17½ p.c. revised list.

Cast Iron.

Loose Pin, dis. 70 per cent.

Wrought Steel.

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.

Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.

Berlin Bronzed, dis. 70, 70 and 5 per cent.

Gen. Bronzed, per pair.....

Can Openers.

Acme, per gross.....

Sardine Scissors, per doz.....

Card.

Horse, per do.....

Carpet Stretchers.

American, per doz.....

Bullards, per doz.....

Carpet Sweepers.

Bissell, per doz.....

World, ".....

Daisy, ".....

Star.....

Crown Jewel, per doz.....

Grand Rapids, ".....

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57½ per cent.

Plate, dis. 52½ to 57½ per cent.

Cattle Leaders.

Nos. 31 and 32, per gross.....

Cement.

Canadian, Portland.....

English.....

Belgium.....

Canadian hydraulic.....

Figures are for carload lots.

Chalk.

Carpenters' Colored, per gross.....

White lump, per cwt.....

Red.....

Crayon, per gross.....

Chisels.

Socket, Framing and Firmer.

American, dis. 75 to 77½ per cent.

Canadian, dis. 50 and 10 per cent.

Tanged firmer, per doz.....

Churns.

Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.

Steel, net.....

Clamps.

Judds', dis. 20 per cent.

stearn's, per doz.....

Clips.

Axle dis. 65 per cent.

Coffee Mills.

Box.....

Side.....

Enterprise, No. 0.....

" No. 2.....

Compasses, Dividers, Etc.

American, dis. 62½ to 65 pe cent

Cradles, Grain.

Canadian dis. 25 per cent.

Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.

Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.

Door Springs.

Torrey's Rod, per doz..... (15 p.c.)

Coil, per doz.....

English per doz.....

Draw Knives.

American, dis. 70 and 10 per cent.

Canadian, dis. 25, 50 and 10 per cent.

Drills.

Hand and Breast.

Millar Falls, per doz.....

P. S. & W., dis. 40 per cent.

DRILL BIT.

Morse, dis. 37½ to 40 per cent.

Standard, dis. 50 to 50 and 5 per cent.

ELBOWS.

Stovepipe.

Per doz.....

FAWCETS.

Cork Lined, per doz.....

Wine, per doz.....

Star,.....

Fenn's Corkstops, No. 2, per dozen.....

Petroleum, per doz.....

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 30 and 10 to 70 per cent.

Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 p.c.

Black Diamond, 50 and 10 per cent. to 50 10, 5.

Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.

Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.

Heller's Horse Rasps, 50 per cent.

Jowitt's, English list, 25 to 27½ per cent.

American, 60 to 60 and 5 per cent.

Great Western, 60 and 10 per cent.

FLUTING MACHINES.

Each.....

FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.

FREEZERS

Ice Cream.

Gem, from \$1.25 to \$7 net.

FRUIT PRESSES.

Henis', per doz.....

Enterprise, dis. 10 per cent.

Shepard's Queen City, dis. 15 per cent.

FRY PANS.

Acme, dis. 65 to 67½ per cent.

GAUGES.

Marking, Mortise, Etc.

Stanley's, dis. 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33, each....

GLASS.

Window.

Box Price.

Star.

Double Diamond.

Per 50 ft.

Per 100 ft.

Per 100 ft.

Under 25.....

26 to 40.....

41 to 50.....

51 to 60.....

61 to 70.....

71 to 80.....

81 to 85.....

86 to 93.....

94 to 95.....

96 to 100.....

101 to 105.....

106 to 110.....

GLUE POTS.

Tinned, each.....

Foamelled each.....

GRINDSTONE FIXTURES.

P. S. & W., per doz.....

HAMMERS.

Nail

Maydole's, dis. 5 to 10 per cent.

25 to 27½ per cent.

Tack.

Magnetic, per doz.....

Sledge.

Canadian, per lb.....

Ball Pean.

English and Can., per lb.....

HANDLES.

Axe, per doz., net,.....

Store door, per doz.....

Chest, per doz. pairs.....

Chisel.

Firmer, per gross.....

Socket Firmer, per gross.....

Socket Framing, per gross.....

Fork.

C. & B., dis. 45 per cent. rev. list.

Hoe.

C. & B., dis. 45 per cent. rev. list.

Saw.

American, per doz.....

Plane.

American, per gross.....

Hammer and Hatchet.

Canadian, 45 per cent.

Cross-Cut Saw.

Canadian, per pair.....

HANGERS.

Door, 4 and 5 inch, per pair.....

Lanes, 50 to 50 and 5 per cent.

HATCHETS.

Canadian, dis. 40 to 42½ per cent

HINGES.

Blind, Parker's, dis. 60 and 10 to 65 per cent'

" Shepard's Noiseless, dis. 60 per cent.

" Buffalo, dis. 60 to 70 p. c.

Light T and strap, 70 and 10 p.c.

Heavy, per lb.....

Screw hook and hinge—

6 to 12 in., per 100 lbs.....

14 in. up, per 100 lbs.....

Screw Eureka.....

Gate, Clark's.....

" Shepard's, dis. 50 to 60 per cent.

Spring.....

" Shepard's Samson.....

HOES.

Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 lis

Planter, per doz.....

HOOKS.

Cast Iron.

Bird Cage, per doz.....

Clothes Line, per doz.....

Harness, per doz.....

Hat and Coat, per gross.....

Chandelier, per doz.....

Wrought Iron.

Wrought Hooks and Staples, Can., dis. 47½ per cent.

Wire.

Hat and coat, dis. 60 to 60 and 10 p.c.

Belt, per 1,000.....

crew, bright, Eng., dis. 60 per cent.

HORSE NAILS.

Canadian, dis. 50 p.c.

Canada Horse Nail Co.'s "C" brand f.o.b. Montreal, "C" 50 p.c.

HORSE SHOES.

F.o.b. Toronto and Hamilton

Steel, ".....

F.o.b. Montreal 10c. less, and London more than above.

ICE PICKS.

Star per doz.....

KETTLES.

Brass spun, 7½ p.c. dis. off new list.

Copper, per lb.....

American, 60 and 10 to 65 and 5 p.c.

KEYS.

Lock, Can., dis. 50 p.c.

Cabinet, trunk, and padlock, Am. per gross.....

KNOBS.

Door, japanned and N.P., pe doz.....

Bronze, Berlin, per doz.....

Bronze Gem, ".....

Sava, ".....

Shutter, porcelain, F. & L. "crew, per gross.....

Door, japanned and N.P., pe doz.....

Bronze, Berlin, per doz.....

Bronze Gem, ".....

Sava, ".....

Shutter, porcelain, F. & L. "crew, per gross.....

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net, to 10 per cent.
Christie, \$7.00 net.
Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
Lightning, per doz. 6 50 8 40
Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
Galvanized, " 1 87 3 85
King, wood, " 2 75 2 90
" glass, " 4 00 4 50
A glass, " 1 20 1 30

LINES.

Fish, per gross 1 05 2 50
Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
Russell & Erwin, per doz. 1 75 7 50
Cabinet,
Eagle, dis. 30 p.c.

PADLOCKS.

English and Am., per doz. 0 50 6 00
Scandinavian, " 1 00 2 40
Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.
Round Head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
No Name Metal, " 18
Mystic Metal, " 08
F. O. B. New York or Chicago.

MALLET.

Tinsmith's, per doz. 1 25 1 50
Carpenter's, hickory, per doz. 1 25 3 75
Lignum Vitae, per doz. 3 85 5 00
Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.

Cut Nails (Steel). Add 10c. to the prices in list for iron nails.

Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburgh is in less than carload lots does not exceed 21c.; other places where rate is higher, excess is added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.

Brads and finishing nails, special sizes, 80 p.c. from new list.

NAIL FULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00
Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
Carbon safety " 0 18 0 00
Canada w. w. " 0 18 0 00
Pratt's Astral. " 0 00 0 21
Pratt's Astral. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50
Zinc and tin, dis. 50, 50 and 10.
Copper, per doz. 1 25 3 50
Brass, " 1 50 3 50
Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25
" Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00
Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis, Mfrs., Bridgeport, Conn.
No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$50 00
No. 38 Hand Machine, range 1½ to 4. 100 00
No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.

Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 37½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers, per doz. 1 00 1 85

Conductors, " 9 00 15 00

Tinners solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 0 17½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis. 60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclusive, 61 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. in ½-lb. boxes and

cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 5½ 00 7½

¾ in. 5½ 00 7½

¼ and 5-16 in. 6½ 00 8½

Cotton 15 17

Russia Deep Sea 00 13

Jute 6½ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

" N.P., per set. 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

B. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshall's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes, per dozen 0 40 0 70

"Empire," McMillan & Haynes, per ft. 0 00 0 70

Hand, Diston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Diston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 0 00 7 50

Whiting, " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 80 p.c.

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Grind, per ton. 15 00 18 00

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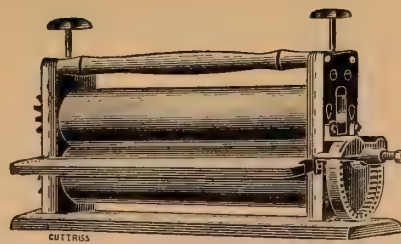
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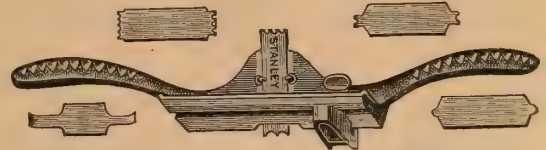
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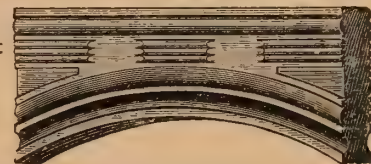
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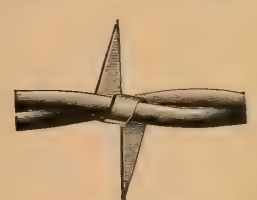
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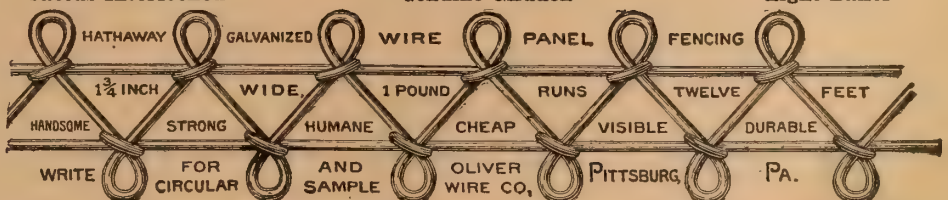
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VOL. IX

MONTREAL AND TORONTO, AUGUST 14, 1897

No. 33



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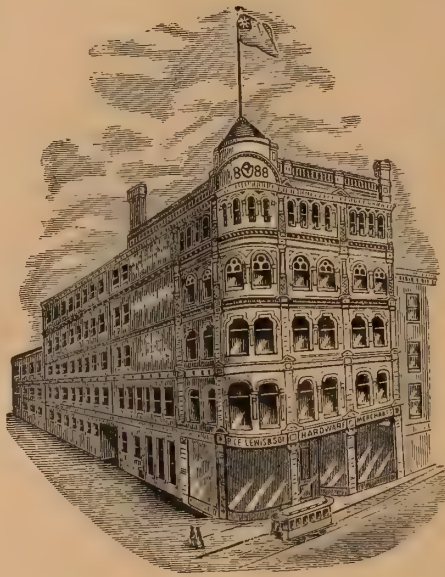
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MONTREAL, October 14, 1895.

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(Signed) R. F. RUTTAN.
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THE LAW OFFICERS' DECISION.

A DECISION has been given by the law officers of the Crown to the effect that the most favored nation clause in the Belgian and German treaties apply to Canada, and that therefore the products of these countries as well as all others enjoying favored nation treatment must be allowed to come into the Dominion under the minimum tariff accorded to Great Britain.

This decision is the result of a submission of the matter to the law officers by the Canadian Government.

When the minimum tariff was brought down on April 22 last the Government hung its case for refusing to accord its privileges to Germany, Belgium, or any other country with whom Great Britain had favored nation treaties on the fact that nothing was offered to Great Britain alone, but to any and all nations ready to comply with certain conditions.

"If," said the Finance Minister in his budget speech, "they (other nations) do not see fit to accept them (the conditions) the responsibility rests upon them and not upon Canada."

Then in another place in the same speech, he said: "We recognize that it is a question

upon which we shall ultimately have to consult with Her Majesty's Government, and I need not say that any view that may be taken by Her Majesty's Government will be considered by the Government of Canada with the respect that is due to any representation that may be made upon any subject, but above all, on a question of an international character."

Most people who gave the matter consideration felt that the ground upon which the Government rested its case was doubtful. And from the remarks of the Finance Minister above quoted and from those of other Ministers which might be quoted, it is obvious that the members of the Government thought so too.

But dubious and all as people were about its legality, the move was a popular one both in Canada and Great Britain.

Although the law officers of the Crown have decided that the products of the most favored nations must enjoy the same privileges as those of the Motherland, Canada can after all congratulate herself that she did the right thing, paradoxical as it may seem to say so. For once at least the end justified the means.

For years Canada had ineffectually sought to have denounced the favored nation treaties with Belgium and Germany which bound her to conditions which were incompatible with her status as a self-governing colony. Even when her efforts had been seconded by the other colonies, vide resolution passed at the Colonial Conference at Ottawa, the results were the same. They did not wake up the English people.

What, however, years of agitation, me-

morials of the House of Commons and Senate and resolutions of the Colonial Conference did not, the minimum tariff of April 22 did. Daily newspapers, from the Times down, devoted columns of space to it, weekly papers and magazines dwelt upon it, while press and people declared that if the treaties with Germany and Belgium prevented Canada from giving the products of the Motherland preferential treatment, then the obstacle must be removed. Then in the midst of this acclaim the colonial premiers met in London and unanimously passed a resolution calling upon the Government to denounce the objectionable treaties. The outcome is known to all men.

But, had Canada not taken the step she did, it is unlikely notice of the abrogation of the treaties would yet have been given. It is certain Canada would not have been lionized as she was at the Jubilee celebration. It is certain she would not have received the world-wide attention she has.

The nations entitled to the minimum tariff are Belgium, Germany, Argentine, Austria-Hungary, Bolivia, Chili, Colombia, Corea, Costa Rica, Denmark, Dominica, Liberia, Madagascar, Morocco, Muscat, Persia, Portugal, Russia, Sandwich Islands, Siam, South African Republic, Spain, Sweden and Norway, Swiss Confederation, Tunis, Uruguay and Venezuela.

But with a great many of these we do no business whatever, and with others, again, but very little. Germany is easily the first in importance, and our imports of dutiable goods from that country in 1896 were valued at \$5,118,245. Our imports of dutiable goods from the other favored nation coun-

tries with which we do business are as follows : Belgium, \$836,693 ; Austria, \$192,677 ; Denmark, \$1,294 ; Portugal, \$46,563 ; Russia, \$2,921 ; Sandwich Islands, \$281 ; Norway and Sweden, \$39,561 ; Persia, \$515 ; Spain, \$346,208 ; Switzerland, \$326,231 ; Venezuela, \$657. The sum total of these dutiable imports is \$6,911,846, or about 10½ per cent. of our total dutiable imports during the year given. The amount of duty collected on these imports was \$1,867,030, or about 9 per cent. of the \$20,219,037 collected on the total dutiable imports.

According to the provisions of the minimum tariff, it will be remembered the rate of duty was to be, until June 30, 1898, one-eighth below that of the general tariff, and one-fourth on and after that date. So that until June 30 next these favored nation-treaty countries will have the benefit of the one-eighth reduction and of one-fourth for the month remaining before these treaties expire.

Taking into consideration the fact that the duty collected on the importations from the countries in question was less than two millions of dollars, it is obvious that the loss of revenue to Canada by the decision of the law officers of the Crown will not be more than one-third, or, at the outside, one-half, of a million dollars. And that is not, after all, a high figure to pay for being freed from a burdensome condition.

WHITE LEAD ADVANCED.

The Canadian white lead manufacturers have at last been compelled to put up their prices owing to the continued advance in the price of raw material. Some weeks ago they held a meeting, but no change was decided upon. Last Saturday, however, it was decided to advance prices 25c. all round, and now quotations are on the basis of \$5.25 for Government standard.

REBATE ON GERMAN GOODS.

The collectors of Customs at the various ports have been this week instructed to admit the products of Germany and Belgium under the minimum tariff of 12½ per cent. Nothing has yet been said in regard to the French treaty.

The Customs officials will be kept busy for a while fixing up the rebates which will have to be made on Belgian and German goods passed since April 22 last,

A STRANGE COMBINATION.

IN following the course of business closely a person often comes across combinations that strike him as being rather strange. A curious one came under the notice of **HARDWARE AND METAL** lately, to manage which would seem to require even more ingenuity of management than the managers of department stores have as yet displayed. It is the case of a St. Jerome, Que., blacksmith who has just added a line of dress goods to his business.

If circumstances did not show that his enterprise was above the average, he would certainly be open for advice. The lines of business in which he is to engage have some similarities in requirements, but they are not so much alike as to render them indistinguishable. For instance, after dropping the rod of iron that he has been cutting he must not attempt to cut off silk by the same means. We would suggest that this merchant dispense with the common electric fan and attach a pipe to his bellows which will lead all his waste wind to the dry goods department, where it can be used in fanning the atmosphere.

MINERS' SUPPLIES.

IT is to be regretted that so many Canadians en route for the Klondyke gold fields should get their outfits in and take their passage at Seattle and other cities in the United States.

One explanation of it is probably due to the fact that the favored cities have been the centres from which have come the press despatches which have day after day for some weeks been filling column after column of the newspapers. But that is only an explanation. It is not a justification.

Victoria, Vancouver and other cities in British Columbia are quite able to provide both outfits for and transportation to the Klondyke.

Loyalty to the home market demands that Canadians going to the now-famous gold fields should patronize Canadian merchants and Canadian transportation companies.

But if that be not a sufficient reason there is another : Canadians who purchase their outfits in foreign cities will be compelled to pay a Customs tax on them when they cross the border.

A good many Canadians en route to the Klondyke probably thought that outfits could

be purchased in no other places but Seattle, Tacoma and other Coast cities in the United States. And, unfortunately, business men and the press in the Canadian cities where miners' outfits are obtainable have not been as prompt in undertaking to remove the illusion as they might have been. Now they are bestirring themselves, and good results will doubtless accrue therefrom.

Miners, like other people, need to be told where and how they can get their supplies. The way to tell them is by advertising, and, judging from the announcements which are appearing in the columns of the Victoria newspapers, the business men of at least that place realize the fact.

The business of the merchant who has not time to read his trade paper is likely to die of shortness of breath.

IRON PIPE HIGHER.

THE jobbing trade in Montreal advanced their scale of prices on black and galvanized pipe this week very materially, as will be seen below. This is a consequence of the advance in makers' prices a week or so ago and an improving demand. In the United States also, where values of a necessity have a direct influence on the market here, values are firmer, having advanced 7½ per cent. on the week, with the probability of a still further advance at an early date. Makers report the mills full of orders, and prompt deliveries are hard to obtain. The new list now ruling is as follows :

Inch.	Black New List.	Pipe. Old List.	Galvanized. New List.
1/8	\$2 50	....	....
1/4	1 80	\$1 87	\$ 2 95
3/8	1 80	1 87	2 95
1/2	2 25	2 13	3 80
3/4	2 70	2 63	4 60
1	3 70	3 55	6 40
1 1/4	4 80	4 62 1/2	8 80
1 1/2	6 35	6 00	11 20
2	8 55	8 12 1/2	15 15

A DUTY FOR MERCHANTS.

The fire which destroyed one of Oshawa's chief business blocks the other day should set business men thinking in other towns whose water supply for fire purposes is obtained from tanks.

When the brigade reached the fire in question and opened the tank for the purpose of inserting the suction hose of the engine it was found that the vessel was

empty, causing a delay of about forty minutes. With nothing to oppose it, the fire naturally spread rapidly until all hope of saving the block was dissipated.

Thus, through somebody's carelessness, a business block lies in ruins and the merchants affected are temporarily compelled to cease from their labors.

It is not at all improbable that Oshawa is not the only town in the country which has tanks filled with air instead of water. And in order to avoid a repetition elsewhere of the Oshawa occurrence merchants should see that not only the water tanks, but all other fire-fighting appurtenances in their several towns are in an efficient condition.

CITY TRAVELERS' MOONLIGHT.

THE fifth annual promenade concert of the City Travelers' Association was held on the steamer Chippewa last Wednesday evening. The evening was delightful, and the eleven hundred excursionists on board thoroughly enjoyed the three hours' moonlight coasting.

The amusement provided on board also passed off pleasantly. It is a great boast of the management of the Chippewa that

music from three sources on different parts of the boat will not create discords, and certainly their boast is not an idle one, for the excursionists on that calm night appreciated all the music from each of the sources just as if none other was provided on board. The Grenadiers' Band rendered selections from the hurricane deck, and pleased all those who were not partaking in or watching the dance, or who did not manage to make an entrance into the concert room. King's orchestra provided music for the dance, and the ladies' cabin made an excellent theatre for the concert. The musical programme of the concert was under the direction of C. H. Collins and G. B. Curran, and among the talent who contributed to the evening's enjoyment were: Prof. E. Hardy, Charles Newton, W. Yule, the Verdi quartette, Bert Harvey, W. H. Bates, Ed. Piggott, Miss Ida McLean, Oscar Wenburn, F. W. Howitt, Lilly Bletsoe, Harry Bennett, and the Misses Idle. The following are the members of the committee who made such a success of the affair: W. F. Daniel, president; R. Maxwell, chairman; C. H. Collins, treasurer; Jerry Burns, secretary, and J. Mortimer, W. H. Steele, E. B. Fielding, G. B. Curran, E. Davis, W. J. Bell, W. J. Parks, J. W. King, T. Holman, E. J. Clifford, E. Turbayne, G. H. Hostetter, J. C. Pearson, D. J. Ferguson.

AN EVIL IN THE STOVE TRADE.

With the arrival of fall the line of trade that will engage the attention of the retailers most will be the trade in stoves. On these goods cutting ought to be out of the question, owing to the great number of makes; and the quality, and not the price, ought to be the dealer's recommendation.

There is an evil that exists, mainly in the cities, however, and it will be interesting to notice how far it will affect the trade this fall. In many of the cities, such as Toronto, there are many small dealers who keep stores on the outskirts or side streets of the city and who have only a few stoves on hand. The stores are managed by the wives of the dealers in the daytime, and if sales are made the men put up the stoves at night. In this way these dealers can sell a stove at a very small margin, for it costs the up-to-date merchant at least \$2 to place the stove in position. The small dealer, too, in many cases pays for the stoves as he sells them, and is thus willing to make only about one or two dollars on the transaction. Dealers, however, hope with improvements in affairs in general and with manufacturers' co-operation to have a good deal of this evil swept away.



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at
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Fitchburg, Mass., U.S.A.



PRINCIPLES IN FINANCE—VALUE.

Henry D. Parmelee, M. A., in *Business*.

IN the transaction of business there is great need of careful definition and a proper use of words in constant usage. Such terms as value, price and credit demand careful study and a strict observance of their proper use. It is easy to escape fine distinctions of meaning absolutely essential to an adequate understanding of terms. There are few terms which cannot have several applications. The only way to confine a term to a specific and not a general meaning is to be careful, and limit it to its proper signification.

The term value has, as a basis of meaning, a fixed standard of price as distinguished from a merely temporary phenomenon, and yet the term has many different meanings. When one says he possesses something of greater value to him than what he could sell it for, he uses value in the sense of "utility." When one says that a possession has value, not knowing what its price might be, he uses value meaning purchasing power in the abstract.

The value of a thing usually exists before barter. Barter is the act which usually fixes value. It is very necessary to keep in mind the distinction between value and price. These terms are very often misunderstood, if understood at all, by a great majority of people. Price may be considered as a fact, and value looked upon as an estimate of what that price ought to be.

Things may have two kinds of values, namely: intrinsic value and exchangeable value. While labor is usually thought of as determining value, other things may determine it also, as supply and demand create value. "A proper and legitimate price," where such price is not extortionate and unfair, is the best and most accepted definition of value.

The word "worth" corresponds to "value" in this definition. Where one practises extortion, he charges and obtains more than a thing is worth. Price is the amount of money asked, paid or offered for commodities or services. Value is the amount of money which may be properly asked, paid, or offered for commodities or services. If we deal with prices, we deal with commercial transactions in concrete. If we deal with values, we judge the advisability and moral aspect of the same transactions. In reality, ethics enter greatly into a discussion of value.

There are many different views of value, but all may be resolved under two heads: the commercial or competitive theory, and the socialistic theory.

THE COMMERCIAL THEORY.

The commercial theory of value is where price is determined and regulated by free

and open competition, and not the result of special bargaining, or misrepresentations. The market price of an article represents only a temporary value; its normal price a permanent value under this view. The arguments for and against free and open competition are many and long. An exposition of them would require much space, and even if possible here, they are not essential.

THE SOCIALISTIC THEORY.

The dissenters of the commercial theory say that any possible good which free competition may do for society as a whole is outweighed by the disastrous effects it has on individual members. Very often, they say, the members of society who have the hardest work to accomplish receive the least remuneration and resultant enjoyment from their labors.

They maintain that price and expense of production should receive more careful adjustment in order to result in a fair and equitable apportionment of the world's enjoyments as rewards of labor.

Cost of production when measured in privations and labor, is a different thing than expense of production which is measured in money. Modern trade, from the socialistic standpoint, consists in buying goods for less than their value, and selling them for more than their value. The socialists contend that cost of production should regulate price, and not the usual and natural causes.

There are many undeniable facts in these assertions, for there is apparent inequality in the returns of labor. Some who do the most disagreeable work have the smallest amount of comfort to show for it.

A positive theory of value formulated upon the above claims, if carried into practice, would cause great inconsistency with our political doctrines and the opportunities of happiness granted by our existing system.

Any attempt to reward every one in proportion to his labor brings us in the presence of a grave danger; namely, the wrong things would be manufactured.

Freedom of choice under this system would result in a superfluity of musicians and actors, with a scarcity of farmers and day laborers. Government regulation as to the number who could go into a profession would be necessary. The disastrous results of such a system would far outweigh any possible advantages. A man of real ability, under the present system, can choose his field of employment. He is free to move wherever he wishes, and seek employment in the most remunerative lines. No one is forced to hold one position unless he is mentally circumscribed, and if that is the case,

it is better for society that he remain where he is.

The reward for efficiency is taken away under the socialistic theory, as a man's returns depend upon how he spends his time, and not what he has done for others. There is an opportunity to waste time, as it counts for as much as time used in labor.

There is no inducement offered for the far-sighted investment of capital, which is a great factor under the commercial theory, if articles which can be produced with little labor or much labor, as the case may be, are paid for according to the socialistic theory. There would be an unwise application both of labor and capital, and, as has been said above, the wrong things would be done.

A motive is given a man, under the commercial theory, for efficiency in his work, aided by the most improved and economical methods. His power in the community, and his success as a business man depends on doing all he possibly can while reducing waste to a minimum. Large fortunes have been made by men in supplying just what society needed at the time it was needed, and in doing their work they learned how to economise social necessities.

In the commercial theory we find that collective efficiency is the keynote of success, and it is best maintained by the free and open competition which is the essence of that theory.

TAKING A VACATION.

Vacations are in vogue this week at the office of the Iver Johnson's Arms and Cycle Works. After a long and extremely busy, as well as successful, season the customary week of rest has come, and now Fred I. and J. Lovell Johnson are at their summer residence at Falmouth Heights, Mass., enjoying the sea breezes. A. N. Smith is on the coast of Maine for a week or so, sailing and fishing. C. H. Wyman and E. E. Perry, representatives of the concern, have traveled to the same state for rest, and many of the office assistants are scattered around the different summering places.

WHAT THE DRESS DEPICTS.

Too many of our young men consider themselves well-dressed nowadays with the lurid colored shirt as part of their toilette. A young man's birth, his training, his tastes, his tendencies, his thoughts, his inner character—all are depicted in his dress with unerring accuracy. Men do not look for nor expect a cold and rigid severity in a young man's attire. But they do expect a quiet effect; a costume which retreats instead of obtrudes. The colored shirt of violent color or design is not the young man's friend, it is his enemy.—*Ladies' Home Journal*.

THIRD-RAIL SYSTEM TESTED.

THE most important move yet made toward equipping the South Side Elevated Railway of Chicago with the third-track system was made the other day at the plant of the General Electric Co. in Schenectady, N.Y., when the system as it will be used in Chicago was given its first formal test. The system has never been used before. The new idea is to furnish each car on the train with motors, all of which can be controlled from the front car. Some time ago the South Side company sent six of their cars to the General Electric plant in that city to be equipped with the pilot and third-track appliances, and last evening the first formal trial was given to the train on 7,000 feet of track constructed for the purpose. The test was made under the personal supervision of Frank Sprague, the inventor of the new system, and was witnessed by Leslie Carter, president of the South Side Elevated Railway Co., of Chicago. The system was tested for two hours under the most trying circumstances, as the track is by no means perfect and was wet by the rains. The test was satisfactory in every respect, however, and all the interested persons were much pleased with the result. Mr. Hopkins, in the expression of his opinion, said: "From a mechanical standpoint I consider that the system, as proved by the test, offers a wonderful advance in transportation methods, and is the ideal system for use on all suburban lines when the passenger traffic is great. A speed of 35 miles per hour was developed and sustained, and this speed was kept up whether one car or six made up the train. In regard to danger to persons or animals by shock from the third rail there is practically none. When the system is in operation the shoe will work through a slot similar to that of a cable road, and at no point will a charged surface be exposed. The system affords the ideal mode of transportation on all elevated or, indeed, upon any railroad."

PESSIMISTIC TRAVELERS

There are too many pessimists in the commercial world, even among the commercial travelers, for the peace and comfort of the individual who would like to glide through this life in a happy frame of mind. I have heard of people whose souls were so small that eight of such could dance a cotillon on the point of a cambric needle, and they rattled in their bodies as they walked. Could someone invent an inflating process to round out this class to a compass that their vision would extend beyond the selfish and sordid limits they occupy, society at large would bless the inventor.—Ohio Merchant.

Results That Amaze

Messrs. Carter Bros., our **S.-W.P.** agents at Picton, Ont., wrote us on the 3rd inst. as follows:

"Enclosed please find order for **S.-W.P.** We were amazed on counting up to find that this order makes two thousand three hundred and sixty-seven (2,367) cans we have ordered since 1st January, '97. We think this a good record for a small town."

We are told Messrs. Carter Bros. are now doing the largest paint trade in their town and county. They are live, pushing, progressive business men. **S.-W.P.** in the hands of such dealers will gain the bulk of the paint business anywhere, any time, every time.

Write Carter Bros. and we'll venture they'll tell you so.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

"RIFLEITE" IS SUCCESSFUL.

THE Smokeless Powder Co., Limited, are well satisfied with the results that their powder has had in the various competitions at Bisley. The record this year has beaten all previous scores that "Rifleite" has had.

First, in their own competition the remarkably high scores of both series show the excellent qualities of the powder. In series II Messrs. E. J. Rigby and John Rigby each made 49 out of a possible 50 with the .256 rifle (Mannlicher), the cartridges being loaded at the factory of the company.

In the "Rifleite" Aggregate Cup it is worth while mentioning the score of Mr. E. J. Rigby, whose four scores, each made on separate days, were 49, 49, 46, 46—190.

Besides these a noteworthy record was that made by Mr. John Rigby with "Rifleite" in the "Elkington" competition at 900 yards. In this match he made 13 successive bullseyes.

Mr. E. J. Rigby had also a splendid score with "Rifleite" in the "Halford" competition at 1,000 yards, making 1 inner and 13 bullseyes.

In the revolver competitions, "Revolver Rifleite" was also well to the front, there

being one possible made by Capt. Prichard in the "Pool" at 20 yards.

These remarkable results show that "Rifleite" possesses commendable qualities besides that of being smokeless. It is manufactured by the Smokeless Powder Co., Limited, Dashwood House, New Broad street, London, Eng.

FERTILIZERS AS SOLD.

The Act Respecting Agricultural Fertilizers requires that at least once a year samples of the fertilizers offered for sale in Canada shall be collected and analysed and the results of such examination published. In compliance with this regulation, a collection was made in April last of 69 samples from Ontario, Quebec, Nova Scotia and New Brunswick. These were submitted to the official analysts at Ottawa, and the results of their analysis have been given in tabular form in bulletin (No. 49) just issued. They are given in such a manner as to enable them to be compared with the manufacturers' guarantee and with the figures obtained in analysing the standard samples.

Appended to the tables are certain "Notes on Fertilizers" which have been found useful in former bulletins, and to which it is desired to give as wide a circulation as possible.

MACHINERY AND MECHANICAL DEPARTMENT.

THE LATEST PERFORMANCE OF THE TURBINIA.

IT was only a few years ago that we were looking forward to the day when some naval architect and engineer would give us a vessel capable of steaming at a speed of twenty knots an hour. So swift has been the development of marine engineering that to-day there exists a bona fide steam vessel that has been run at just double that speed, or, to be exact, at the rate of $40\frac{1}{2}$ miles per hour.

This vessel, when first built, was fitted with a single turbine and screw, but on trial it did not come up to expectations, as it only realized a speed of 29.6 knots. The single turbine was removed and three separate turbines were erected in her, coupled to three screw shafts. After this alteration she attained a speed of 37.75 miles per hour, as mentioned in a previous number of *HARDWARE AND METAL*. And at the time of the last notice of this phenomenal little craft we were informed by Hon. Chas. Parsons, inventor of this particular type of turbine, that the turbines had never demonstrated their actual power, for the reason that the main steam pipe had proved to be too small to supply steam as fast as the turbines could use it.

Judging from reports in the English technical press, this defect was made good and the motive power tuned up to its working pitch, for it seems from a statement of Sir George Baden-Powell, who was on board the *Turbinia* as she steamed down the lines of the fleet at Spithead, that she reached a speed of 34 knots. In a letter to Engineering Mr. Parsons states that during a recent trial the turbines indicated 24 horse-power and gave the boat a speed of 35 knots. This is equivalent to $40\frac{1}{2}$ miles an hour.

As a mere question of speed this is a phenomenal performance and it is not likely it will ever be reached by a boat driven by an engine of the reciprocating type; but the wonder of it is increased when Mr. Parsons goes on to say: "it was done with an expenditure of 14 pounds of steam per indicated horse-power." When we bear in mind that the best type of Corliss compound engines, working under favorable conditions, will consume not less than 18 pounds per indicated horse-power, the high economy of the compound turbines will be appreciated. In the issue of July 31 of *The Scientific American* it states "that it must be admitted that one could wish for more exact details of these runs. The speed is given in round numbers, which suggests rather careless or crude timing. Sir William White, chief constructor of the British navy, has suggested that some builder of torpedo boats, like Yarrow or Thornycroft, should

first run a boat with a set of his own engines and then substitute Parsons turbines with a view to determine their relative efficiency. Such an experiment, if carried out at considerable length, would settle the question as to the economy and practicability of the turbines for propelling vessels."

If this little vessel of only 100 feet in length can make such an enormous speed, what could you expect from a ship like the *Lucania*, which, with the ordinary reciprocating engines, can attain 22 knots? Why, traveling at 40 miles an hour you could cross the Atlantic in less than four days, which might be possible if she was fitted with the Hon. Chas. Parsons' engines.

Below I reproduce a list published by *The Scientific American* of the fastest vessels in the world.

Name.	Description.	Miles an hour.
Turbinia (English).....	Torpedo boat	40.33
Ellide (American).....	Yacht	36.5
Star (English).....	Torpedo boat	36.
Porter (American)	"	34.
Feiseen "	Yacht	31.6
Norwood "	"	30.
Yankee Doodle (American).. <td>"</td> <td>29.6</td>	"	29.6
Vamoose (American)	"	26.

THE ETIQUETTE OF COLLECTING BILLS.

IT is impossible to run a hardware store with tin shop and stoves without giving more or less credit. Your customer won't pay in advance for work and you finish it before getting paid. You have to credit him from the time the job is done until it is paid, be that long or short. Experience and custom have shown us that it is not just the thing to send bill in the very day the job is done. Time should be given your man to call on you if he is a reputable man. Of course, if he is a scamp he deserves no consideration or credit. If credit is given, an understanding as to time is necessary. When that expires, perhaps a day or two grace should be given to allow for detention.

There are a great many good people who are particularly sensitive about a "dun," as they call it—as if the call of a gentlemanly young man with your account from the store can be called by that name. I had a customer work himself into a perfect fury because I sent a boy to his home with a bill that was past due. Some neglect their bills and yet get mad if reminded of them, but the storekeeper must hold his temper and tongue and "be polite." It seems to be tacitly admitted that it is not good form to ask a man for his bill on the street, but years ago it was not thought much out of place in this town. It does also appear that bills should not be presented after banking hours or before, unless there is no other

chance of seeing your man. The collection of one's just dues is often the most unpleasant part of the business. It requires more tact and finesse than the selling of the goods. Politeness, a winning way, a kind heart to those who would pay if they could—all these and more too are necessary to be a successful collector of bills.—*The Metal Worker*.

HE GOT HIS ANSWER.

THE *Philadelphia Times* relates this story of a commercial traveler who was answered, but the answer was very different from what he had expected:

As the train pulled out of Chicago, a quiet, gentlemanly-looking man entered the buffet car, and, ensconcing himself in a comfortable chair, drew out a long cigar and entered deeply into his paper. He remained so quiet and retained his seat so long that another passenger, whose bearing distinctly stamped him as a commercial traveling man, one of the kind full of chatter and curiosity, could no longer restrain himself. Addressing the quiet gentleman, he enquired, "Traveling east?"

Slowly removing his cigar, the gentleman turned and looked at his questioner with slightly elevated eyebrows, replying, "Yes." "New York?" "Yes." "Pleasure?" "Yes and no." "Great place, New York. Ever been there before?" "No." "I'm going home this trip—New York, you know."

The gentleman made no reply, but resumed his paper. After a little silence the commercial man began again:

"I'm with C. & Co., on Broadway. If you drop in I'll show you over the city." "Thank you, it will not be necessary!" "Excuse me, but might I ask what you're going to New York for?"

By this time most of the other passengers were interested. The gentleman, who was extremely annoyed at the drummer's curiosity, laid down his paper and exclaimed: "I'm going to New York, first, because the train is taking me there; second, because I've got lots of money and can afford it, and, last, because if I like the place I intend to buy it."

The commercial man subsided amid a roar of laughter.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

H. S. HOWLAND, SONS & CO.

**WHOLESALE
HARDWARE**

37 Front St. West

...Toronto



AMERICAN

DEAD SHOT

FG. FFG. FFFG.

Manufactured by

"American Powder Mills"

STRONG, UNIFORM, CLEAN.

IN 25-LB. IRON KEGS.

The sale of this powder during the last thirty years has steadily grown in United States and Canada



SCHULTZE

SMOKELESS

This powder is the best known and has the best reputation of any smokeless powder on the market.

.. ALSO ..

Hamilton Blasting and Sporting Powders

FUSE—Hemp, Single Tape and Double Tape

GUN WADS—Eley's and Baldwin's

CARTRIDGE CASES—Eley's, U.M.C. and Dominion

METALLIC CARTRIDGES—U.M.C. and Dominion

LOADED SHELLS—U.M.C. and Dominion.

GUN CAPS and PRIMERS—Eley's, U.M.C. and Dominion

LARGE ASSORTMENT

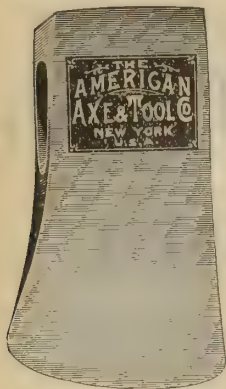
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PIEPER B.L. GUNS. WINCHESTER AND MARLIN RIFLES

Graham Cut and Wire Nails are the Best.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

DON'T GIVE UP.

JONAH was an unwilling guest. He wanted to get out. However much he may have liked fish he did not want it three times a day and all the time. So he kept up a fidget and a struggle and a turning over, and gave the whale no time to assimilate him. The man knew that if he was ever to get out he must be in perpetual motion. We know men who are so lethargic they would have given it up, and lain so quietly that in a few hours they would have gone into flukes and fish bones, blow hole and blubber.

Now we see men all around us who have been swallowed by monstrous misfortunes. Some of them sit down on a piece of whalebone and give up. They say: "No use! I will never get back my money or restore my good name or recover my health." They float out to sea and never again are heard of. Others, the moment they go down the throat of some great trouble, begin to plan for egress. They make rapid estimate of the length of the vertebrate, and come to the conclusion how far in they are. They dig up enough spermacetti out of the darkness to make a light and keep turning this way and that, till the first you know they are out.

Determination to get well has much to do with recovered invalidism. Firm will to

defeat bankruptcy decides financial deliverance. Never surrender to misfortune or discouragement. You can, if you are spry enough, make it as uncomfortable for the whale as the whale can make it uncomfortable for you. There will be some place where you can brace your feet against his ribs, and some large upper tooth around which you may take hold, and he will be as glad to get rid of you for a tenant as you will be glad to get rid of him for a landlord.—Christian Herald.

DON'T BE A MACHINE.

The National Advertiser is of the opinion that "there is no moral law of any decalogue that obliges a retail merchant to forego the opportunity of having the last chance at a customer. It is an advertising advantage he is rightfully entitled to. Let him use it rightfully and nobody has an equitable ground of complaint. The store is his; the goods are his; his whole outfit, himself included, is a standing advertisement for the goods he wants to sell. He is there to make money. He is a fool if he doesn't try to make as much as he honestly can. If he conscientiously believes goods of his own make to be 'just as good' as any other sold for the same purpose, why, in the name of common sense, shouldn't he say so? If he doesn't believe it or doesn't know anything about it, and yet says so for the sake of a

little profit, then, of course, he lies, and that certainly is immoral enough. But this business of giving a customer 'just what he calls for,' if pushed to the logical conclusion to which apparently you wish to push it, would turn every retail storekeeper into a mere sort of 'nickel-in-the-slot' machine."

A NEW WIND-PROOF LANTERN.

We call the attention of the general hardware and lamp goods trade to the "Royal Cold Blast" safety tubular lantern shown on page 26 of this issue. It is a new wind-proof lantern, which is being manufactured by the Ontario Lantern Co., Hamilton. The manufacturers claim that this lantern will burn any grade of kerosene oil, and is not affected by the wind. They have just received a large order from British Columbia for the Klondyke gold region. On account of the extraordinary steady light which the "Royal Cold Blast" produces, it is specially adapted for mining camps.

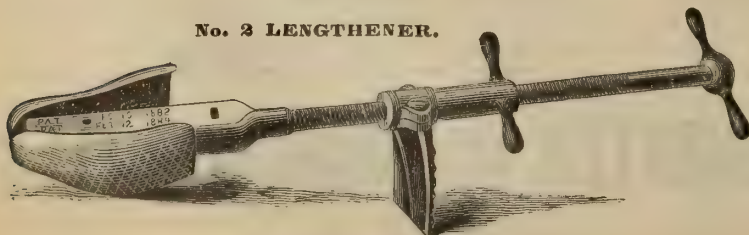
MONTREAL FAIR.

The Montreal Exhibition Co. have practically completed all arrangements for the big Fair to be held during September in the Metropolis. In addition to large and varied industrial and agricultural exhibits, there is to be an extensive programme of special attractions. The different railway companies are offering reduced fares, and the directors confidentially expect that the Fair of 1897 will be the most successful in their history.

THE KNAPP & COWLES MFG. CO.

BRIDGEPORT, CONN., U.S.A.

No. 3 LENGTHENER.



Boss Shoe Stretcher.

This Shoe Stretcher is made of the best Malleable Iron and Steel, and will stretch from infants' No. 4 to men's size No. 13; will stretch shoes at any point desired, and also lengthen the shoe.

Prices quoted upon application.

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . .

Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000

. . Manufacturers of the . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

... **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails
Binder Twine
Cordage
Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

OXFORD Warm Air FURNACES

For Coal or Wood
Six Styles—Fifteen Sizes

With these furnaces, unequalled results are obtained. Always reliable. Quickly and easily regulated. Especially economical in fuel consumption. Maintain an even temperature at all times. Are easily operated. Fitted with all the latest and best appliances. Note length of fire travel.

Steel or Cast Iron FIRE BOX DOME.
Guaranteed Capacity.

For Steam or Hot Water Heating, use Oxford
Boilers and Radiators.

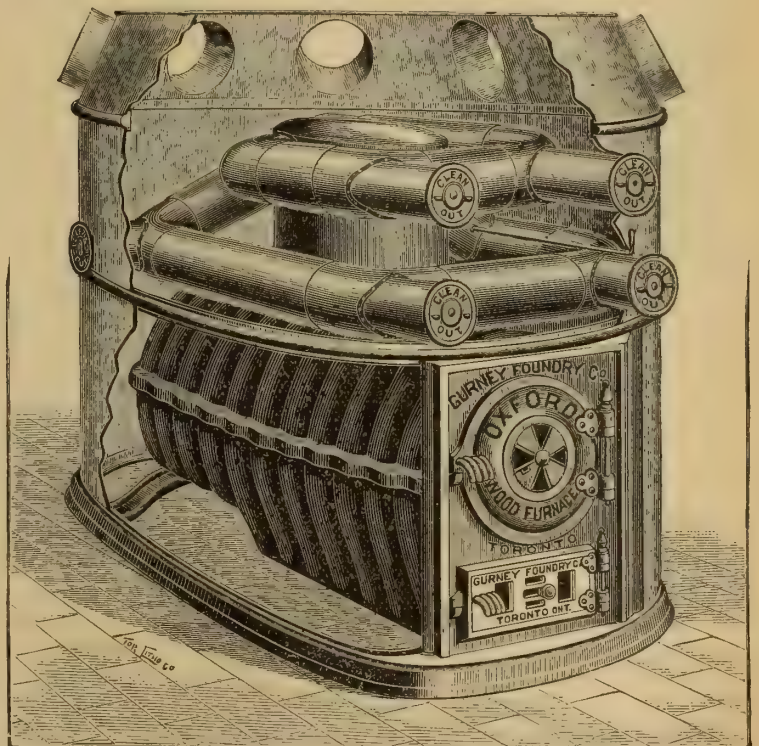
Range of Capacity, from 10,000 to 80,000 Cubic Feet.

SEND FOR CATALOGUE.

Manufactured by

The GURNEY FOUNDRY CO. Limited, **TORONTO**

The GURNEY-MASSEY CO. Limited, MONTREAL.



Wood Furnace—With Double Pipe Steel Cylinder Radiator.

FOUNDRY FACINGS.

By H. F. Frohman, in *Iron Age*.

SOMETHING is needed in a foundry that will prevent the sand of the mold from being burned by the molten metal, that will cause the castings to peel readily, that will deliver the castings smooth from the mold with a slick surface and a bright color; something that will neither run nor burn away before the molten metal at the time of pouring; something that will adhere to the surface of the mold and part and peel the sand well when the casting is to be shaken out; something of such a nature that it can be smoothed or slicked in the finishing of a mold. This something we term a foundry facing—a material of a very refractory nature that will stand any amount of heat—more than the temperature of the molten metal. I fully understand that all facings are not necessarily to be slicked. Some facings are only to be dusted on the mold, but I am now speaking generally of the requirements of a good facing. The something that will do all this is carbon. Facings are not cures of all evils and ills in a foundry, for good sands as well as good molders and the use of good common sense are as essential as good facings and blackings. These latter merely assist the former.

The most common facing (which is a misnomer, as it should be termed a mixer) is sea coal or coal facing. This is used in almost every foundry. This is the only facing known which is not put on the face of the mold, but is mixed with the sand in the proportions of one shovelful of coal to 10 or 20 shovelfuls of sand, according to the size and weight of the casting to be made. This sea coal or crushed coal is mixed with the sand nearest to the surface of the mold, in order to rot, or, in other words, to break up the particles of sand, so that when the molten metal comes into the mold in its heated state it does not fuse the sand into a hard mass similar to glass, but allows the sea coal to burn away and leaves the sand in a separated condition, so that when the casting is cooled off these particles of sand separate and drop off. There is another reason why sea coal is mixed with the sand. This is to vent the mold and allow the gases to escape. Sea coal facing is made from the very best quality of soft or bituminous coal, containing neither slate nor phosphorus, but high in hydrocarbon gases and volatile matter; and the best gas coal makes the best sea coal facing. As stated previously, this is the only kind of facing that is mixed with the sand. All the others are either dusted on the mold or applied with the hand or brush, used wet or dry as the class of work requires. Not only is sea coal necessary to produce a good and sound casting, but a facing or blacking is needed that will

close up the pores of sand on the face of the mold so as to produce a smooth surface, and also to a certain extent pave the way so that the molten metal will have an easy glide and at the same time overcome as much resistance as possible and not in any way retard the flow, but, on the contrary, help it along to find its proper resting place and prevent any of the sand from clinging to the casting after it has been shaken off. The facing must be of high carbon, so as not to burn away, but to remain on the surface of the mold and act as the separator between the iron and sand. The best grade of separator (if we are allowed to use that name) is what we term plumbago, silver lead or graphite. These three names mean essentially one and the same thing.

Probably the best grade of plumbago in its crude state is found in the island of Ceylon, among the East India Islands. A fair quality is also found in New York State, but the greater part of the facings used in this country are made from the Ceylon grade. The crude plumbago is mined and carried from the mines in its crude state by the natives in baskets to above the ground; here it is separated, the lumps in one pile, chips and dust in another. It is then put up in large barrels or hogsheads and sent to this country in sailing vessels as ballast. The manufacturers receiving it in this manner, reduce, pulverize and mix it to suit the various classes of work for which it is intended. This Ceylon plumbago being purer, richer, of a more particular nature, is best adapted for facing purposes. Unlike any other carbon or even graphite used for foundry purposes, a pure and good grade of plumbago can be used for almost any kind of molding, such as dusting, putting on the mold with a brush, in dry sand or green sand work, or for core wash, either painting the cores or dipping them. This is probably the best facing to use, and the foundrymen and molders are realizing this generally. In former years pounds were used, while we might say tons are consumed at present. A pure plumbago is not affected by heat, cold or acid, and on account of its greasy nature acts as a sort of lubricator in the mold, helping the iron to find its proper resting place.

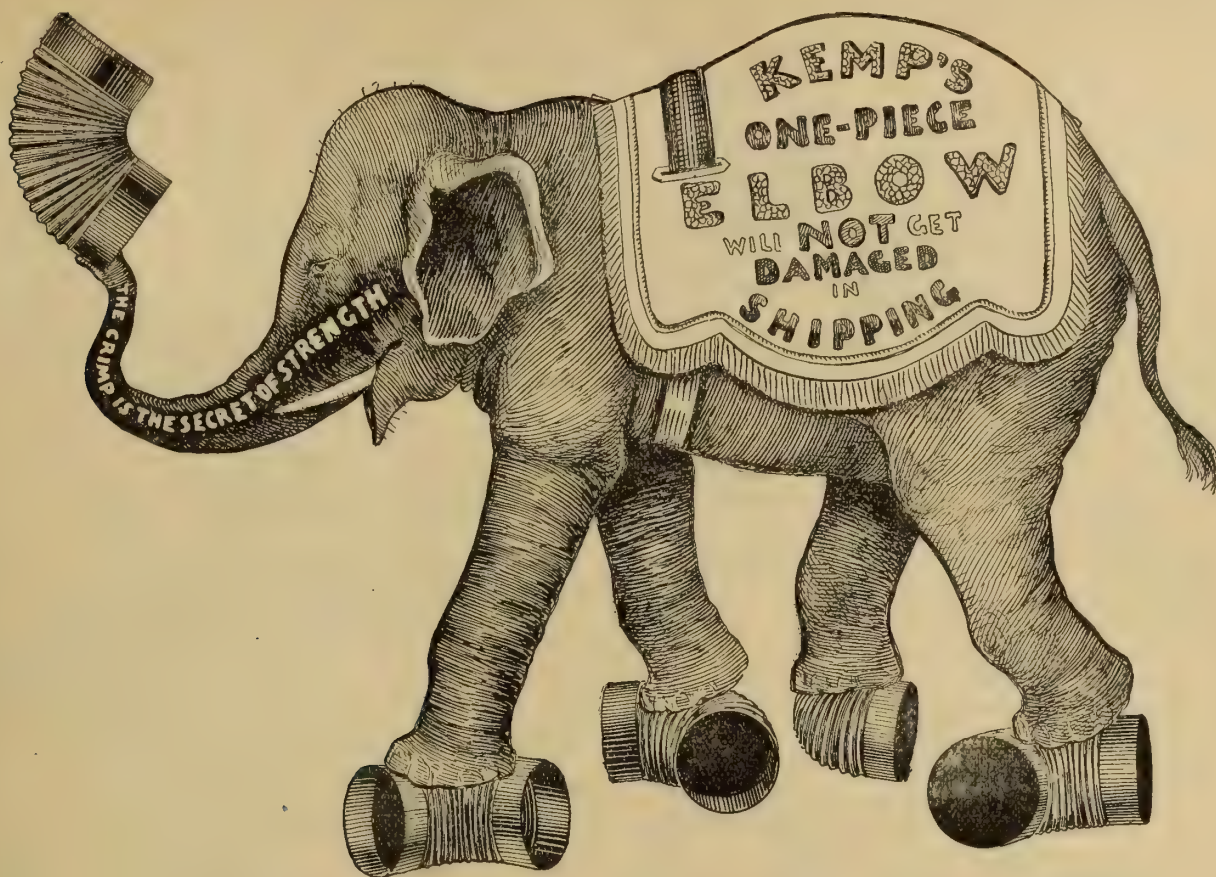
In making stove plate castings and other light work which is very thin an extremely smooth surface is required. Two facings are necessary for the finishing of a mold—a first or heavy facing to fill up the pores of the sand and a second or light facing to make a good print or impression on the surface of the mold and at the same time to prevent the heavy or first facing sticking to the pattern, thereby saving the mold from being disturbed, to assist in peeling the casting, and, lastly, to give the casting its proper color. Stove plate castings are made so

light and thin nowadays that any defect in molding could be easily seen, and therefore would make the castings useless for the purpose intended. Other castings might be plugged or filled, but stove-plate castings cannot. The heavy facing used in stove plate molding is usually made from an extremely heavy carbon or graphite, while the light facing is a combination of charcoal and coke, etc., or lighter carbons. The heavy facing is to withstand the heat of the iron, while the lighter prevents the former from curling up or running before the iron, and also prevents the mold from being disturbed and also gives the casting the desired color.

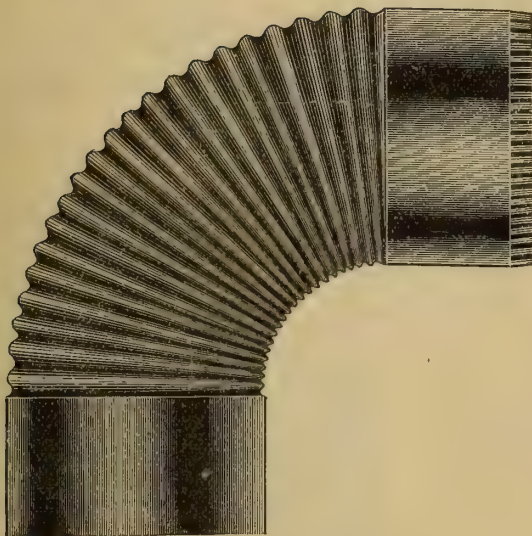
Besides the foregoing there are a number of different kinds of facing, for different kinds of work, such as soapstone facing, which, by the way, is the only facing known not of a dark color. This soapstone is used for hollow ware and other light castings, and is also used by foundrymen generally to mix with plumbago in order to cheapen it. In feeling, soapstone is of a greasy nature similar to plumbago, but soapstone cannot be used to any advantage by itself, but is applicable for general work if mixed with blackings. Soapstone facing used on the mold produces a light color casting with the appearance of having been whitewashed.

In former years, before the foundrymen used such quantities of imported plumbago, a certain Rhode Island facing was the standby and was supposed to be the cure for all evils in the foundry. It was used considerably then for all classes of work, but it has been supplanted by something better. Its nature was similar to plumbago, but not nearly as rich or pure. Its greatest drawback was that it was too sticky and that it would not slick. But as the facing business has advanced this Rhode Island facing has become a thing of the past and is now succeeded by those of higher grade and qualities.

Mineral facing. X, XX, XXX, XXXX, and as many more X's as you want to add, is made from a graphite coal and is used on general work in a foundry when a particularly smooth surface is not required, merely dusted on to save the casting cleaner labor. This mineral facing in its different forms is used in car wheel foundries, where it is essential and a good mineral facing is necessary. At the present prices ruling for car wheels and general car castings, foundrymen advise us that they cannot purchase as expensive blacking for this purpose as they could formerly, so it has been left to the facing manufacturers to produce a mineral facing at a minimum cost that can be dusted on the mold (not necessarily to be slicked), that will prevent the iron from cutting into the sand, that will not affect the chill in any



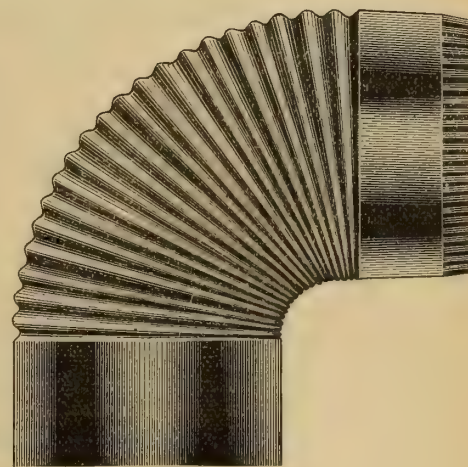
MADE IN TWO QUALITIES



No. 1

Is made of extra heavy smooth iron, with long ends.

The elbow has a most attractive appearance.
 The design of the crimp is the secret of its strength.
 It will not get damaged in shipping.
 It can be bought as cheap as the ordinary pieced elbow.
 It is rivetted, ready for use.
 It has a coating which prevents rust.
 It is in every respect what the trade demands.



No. 2

Is made of ordinary iron, with half-inch shorter ends.

The improved process of manufacture produces a short turn, therefore less material is used and consequently less weight per dozen, WHICH RESULTS IN A GREAT REDUCTION IN FREIGHT, AND A REDUCED COST TO THE BUYER

Kemp Manufacturing Co., Toronto

way, that will not burn away, but bring out the casting free from the sand when shaken out.

There are many more different kinds of facings and blackings for the different kinds of work, and each and every manufacturer classes them according to his notion and pocketbook, but I have mentioned the principal ones, probably with the exception of pipe blacking. This requires a special blacking containing no impurities whatsoever, and extremely rich in carbon. In putting cast iron pipes to a hydraulic test impure or inferior blacking will show its results more than in any other class of iron founding. The blacking used in pipe foundries is subjected to a chemical analysis before its acceptance for this purpose.

Under foundry facings we might embrace blackings for dry sand work, but as that is almost a separate study of the business, I would prefer leaving it to some future time for discussion. However, I will refer to this class in a few words. For dry sand work, as well as painting cores, about the same ingredients are used as for dusting, only mixed in a different manner and such other ingredients added as will not dissolve in water. In mixing a blacking for a wash it should be mixed very carefully and worked just as our mothers made up their dough in making bread. Add a little blacking, then water, then blacking, then water, until you have secured the consistency wanted. If this blacking is so mixed it will be found to give much better satisfaction, and at the same time save the molder and the casting cleaner much annoyance.

Facings and blackings should always be kept in a dry place. As a rule, they absorb more or less moisture, and if they are damp they cause any amount of unnecessary trouble to molders, the result of which no doubt all of you have experienced. I have noticed time and again that if a casting is lost, first the facing is blamed, then the sand, etc., but never the molder. For the benefit of foundrymen in general, I desire to state that a facing and blacking will always show its defect in ways that can easily be traced. If of poor quality it will run or burn away when the molten metal comes in the mold. If too much is used it will wash or run before the iron and allow the molten metal to cut deep into the sand, or if the metal is poured too hot the blacking is liable to curl up and slide into one corner of the mold. Too much sea coal used in the sand will show a mapped casting; not enough used will allow the sand to cling to the mold.

Arrangements are under way to start a new bicycle factory in London in the near future.

EDISON'S VIEW OF HORSELESS CARRIAGES.

A REPORTER of a daily paper interviewed Edison recently upon the subject of horseless carriages. His opinion is that the problem rests on the construction of cheaper and lighter motors. Over two thousand men are at work in this country alone trying to invent better motors for horseless vehicles. Hundreds of others in Europe are also engaged in the same task. The automobile is bound to be in general use before long. Take the bicycle, for instance. The high-grade wheels which cost one hundred dollars each to-day will in a few years at best drop to fifty dollars, and the machines that can now be bought for from fifty to seventy-five dollars apiece will cost only fifteen or twenty dollars. The same thing will be the outcome of the experiment with horseless carriages.

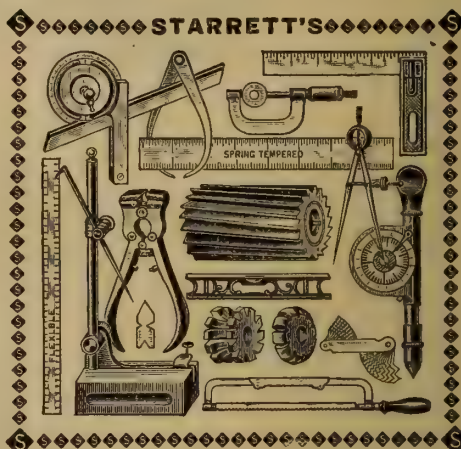
The motors now cost from \$250 to \$350 each. The motors will also be made smaller and can be more easily manipulated. Then tricycles and light road vehicles can be put on the market at a cost of \$100 to \$125 each; a serviceable light vehicle to carry two, or even four, people can be made after the principle of the tricycle at a cost of from \$100 to \$125. In the construction of the motor there are three different kinds of power to consider—gas, petroleum and electricity. Electricity should be the best and cheapest. The most successful automobiles made thus far are those in which electric motors are used. They can go twenty-five miles or more without being recharged, at the rate of ten miles an hour. Delivery wagons, express wagons, broughams and all of the heavier class of vehicles can be driven as easily by a storage battery as any other kind if the battery is improved sufficiently, and that will unquestionably be done.

FRACTURE IN STEEL.

The subject of microscopic fractures in steel engineering work has lately been discussed by the Sheffield Society of Engineers and Metallurgists. In a paper on the subject by Prof. Andrews, it was shown that an ordinary railway axle is composed of about 2,313,178,300 primary crystals, the latter being often again subdivided into still larger numbers of secondary crystals. This paper pointed out that many fractures in steel are due to the presence of innumerable internal microflaws in the metal caused by the presence of very minute quantities of sulphur and other impurities. Sulphur was declared to be the most dangerous element in producing these microflaws, owing to the formation, during the solidification of large masses of steel, of sulphide of iron, which, on the final crystallization of the metal, located itself between the ultimate crystals of the steel.



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L. S. Box 5
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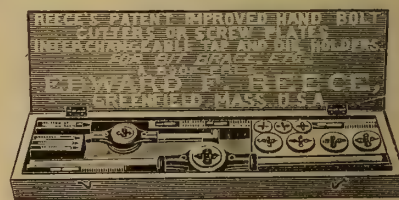
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Canadian Patent, April 3, 1897.

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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

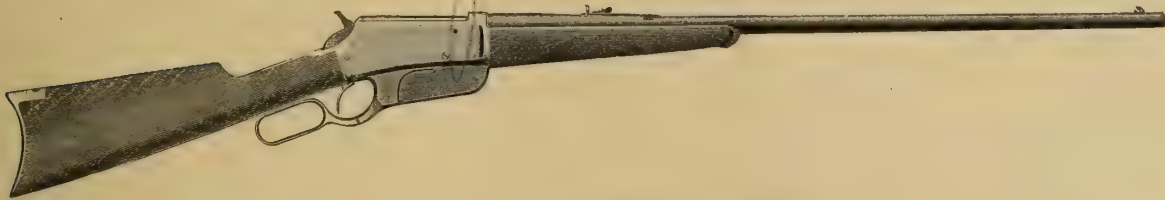
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English
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Shells,
Cartridges,
Reloading Sets
and full line of
Ammunition.

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Never mislaid---the careless employee can't use it for ordinary purposes---it won't stand alone---“for fire only”---it's of no use for anything else.

The round bottom does it.

The E. B. EDDY CO. Limited

HULL

MONTREAL

TORONTO

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, August 13, 1897.

HARDWARE.

THOUGH the midsummer dulness rules in many lines of iron goods, the hardware market is far from wanting in animation. This is particularly the case with shelf goods, there being a good active trade to report in screws, bolts and rivets, while orders for cutlery for fall delivery are coming in well. Barn-door hinges and other fixings are also briskly enquired for, and the trade generally consider this a cheerful sign, as it indicates that the farmer thinks he can afford to spend some money this fall.

BARBED WIRE—Remains much as it was last week. We quote: \$2.20 to \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—Business continues very quiet and discounts are unchanged at 30 and 5 off, f.o.b. Montreal.

WIRE NAILS—Business in these has ruled dull during the week, new orders being few and for small quantities. We quote the range at \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS—Business quiet, only a few small orders being noted. We quote the base \$1.85, f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—A fair business is noted in a small way, with discounts unchanged at 50 per cent.

HORSESHOES—Demand for these shows little expansion, being confined to small lots. We quote f.o.b. Montreal: Iron shoes, \$3.25; steel shoes, XL 3 and 4, \$4.50; ditto 0 and 2, \$5.25; assorted, \$5; steel toe weights, \$5.50.

SCREWS—These moved out well during the week, and quite a number of new orders came in. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Unchanged, with discounts as last quoted at 12½ per cent.

BOLTS—There has been a good enquiry for bolts. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—Move out freely with the above. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There has been a good enquiry for cordage. We quote as follows: Sisal, 7-16 and upwards, 5⅝c.; ¾, 6⅝c.; 5-16 and ¼, 6⅝c., and 3-16, 7⅝c.; manilla, 7-16 and upwards, 7c.; ¾, 7⅝c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—Demand almost over for these. Discounts are, 60, 10 and 10, 4 months, or 3 per cent. cash 30 days.

CLOTHES WRINGERS—The same remarks apply to these, which we quote as before, at \$28 to \$31.50, as to brand.

HARVEST TOOLS—The volume of trading in these shows decrease, but it kept up much longer than was the case last year.

SPADES AND SHOVELS—Quiet and unchanged.

FILES—Orders for these were booked quite freely during the week. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

BUILDING PAPER—Business in building paper has been quite fair during the week. We quote: Plain building, 30c.; tarred lining, 40c., and do. roofing, \$1.40.

LEATHER BELTING—in fair demand.

HINGES—Barn door hinges and other fixings are in active request, individual orders for them being quite extensive. We quote:

Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WARE—Both tin, plain, iron and enamel were are being asked for to a satisfactory extent.

CUTLERY—Orders for this line for forward delivery are in excess of those for the same time last year and jobbers look for a good fall turnover.

SPORTING GOODS—Quite a number of large orders for guns, rifles and ammunition are reported this week.

SHOT—There is a good demand for shot. We quote: Dropped shot, 16c.; chilled shot, 6⅝c., and buckshot, 7c., less 17½ per cent. trade discount.

WIRE CLOTH, ETC.—The movement in this is gradually decreasing.

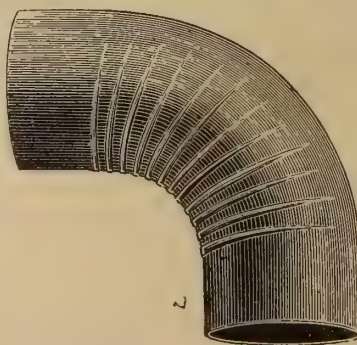
CEMENT—The wet weather interfered with the current movement in cement. Stocks on spot, however, are exceedingly light and prices are firmly held. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2 per bbl. ex wharf.

FIREBRICKS—An active trade has been done in firebricks at \$16 to \$21 per 1,000, as to brand.

METALS.

With the approach of the fall, the volume of orders for fall account shows an increase and in other ways the market for heavy iron and metals exhibits a better feeling. In fact, a brisk fall business is confidently anticipated. Prices here are largely governed by the condition of values in the States, and as

ELBOWS . . .



Do not place your orders for elbows thinking we cannot supply as cheaply as others. We are in a position to sell any style of elbow at the same prices as others, and . . .

We Will Guarantee Prices

3 Styles { 1 Piece, Heavy, 5, 6 and 7 inch.
1 " Light, 6 " 7 "
4 Pieces, Heavy, 5, 6 " 7 "

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

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PLATE GLASS

THE BEST AND PRICES THE LOWEST
AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

TheWightman 403 St. Paul St.
Sporting Goods Co.

MONTREAL

business there seems to be on the mend, this will have an effect on our market. All lines rule steady to firm and iron pipe, Canada plates, black and steel plates, and terne plates are firm.

PIG IRON—Foundrymen and buyers generally are doing little in pig iron. We quote: Hamilton, \$15.50 to \$16 for No. 1, and \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrson, No. 1, \$17; Eglington, \$17; and Carnbro', \$16.50.

BAR IRON—Trade continues quiet and prices are unchanged at \$1.35 to \$1.40.

BAND IRON—Steady and unchanged at \$1.65.

HOOP IRON—Continues without feature at \$2.25.

SHEET STEEL—Firmly held, and it is not improbable that prices will go higher shortly. We quote \$2.35.

SHEET IRON—There is a strong feeling in black sheets and stocks are not well assorted. Holders of the heavier gauges are very firm in their price. We quote \$2.25 as the base.

GALVANIZED IRON—The same remarks apply to galvanized iron. Stocks both of "Queen's Head" and "Morewood" are light and values are strong at \$4.25 to \$4.30.

TINNED IRON—Continues quiet and unchanged at \$5.50 up to 20 gauge.

LEAD PIPE—A fair jobbing enquiry is noted for lead pipe at 7 to 7½ c., with 30 and 5 off.

PIG LEAD—This article continues firm at \$3.40 to \$3.50.

INGOT TIN—Prices are unchanged at 16 to 16½ c., with demand rather quiet.

INGOT COPPER—Quiet but steady, at 12 to 12½ c.

SHEET COPPER—Continues the same at 16c.

IRON PIPE—There is a good enquiry for iron pipe, and prices have advanced this week to the following range: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.80; 1-inch, \$2.25; 1¼-inch, \$2.70; 1½-inch, \$3.70; 1¾-inch, \$4.80; 2-inch, \$6.35; 2½-inch, \$8.55. Galvanized pipe, ¼-inch, \$2.95; ½-inch, \$2.95; ¾-inch, \$2.95; 1-inch, \$3.80; 1¼-inch, \$4.60; 1½-inch, \$6.40; 1¾-inch, \$8.80; 2-inch, \$11.20; 2½-inch, \$15.15.

CANADA PLATES—Demand has been brisk, but supplies are very light, and we quote prices steady at \$2.25 to \$2.30.

TIN PLATES—There is a fair enquiry for these. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—Stocks of these continue light, and prices are firmly held at \$6.25.

BOILER PLATE—Unchanged at \$1.90 to \$2.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Best Charcoal Rolled Iron.

B. B. Axe Horseshoe Iron.

AND FACTORIES
MONTREAL

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

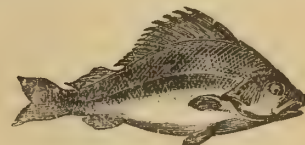
Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION
HAMMOCK MANUFACTURING CO., Paris, Ont.

SOLDER—Quiet and steady at 12c.

SPELTER—More firmly held at \$4.75.

ANTIMONY—Quiet, at 9½ to 10c.

SHEET ZINC—Prices are unchanged at 5¼ to 5½c. for jobbing quantities.

SCRAP IRON—Buyers are fairly well supplied with scrap, and there is little doing. We quote: No. 1, \$12, and No. 2, \$6 to \$7.

PAINTS, OILS, ETC.

Business in paints and oils continues quiet as usual at this season, but one or two round orders are reported to have been placed this week. Linseed oil is steadily advancing abroad, but no change has taken place in this market. Turpentine is slightly easier in the south, but is being firmly held here at the recent advance. The feature of the week has been the advance in white lead, which took place last Saturday, the continued advance in price of raw material having forced makers to follow suit.

WHITE LEAD—In fair demand at the advance. Government standard, \$5.25; No. 1, \$4.87½; No. 2, \$4.50; dry white, \$4.50.

RED LEAD—As before, at 4c. in casks and 4½c. in kegs.

LIQUID PAINTS—Quiet at steady prices.

SHELLAC—As before at 25c.

PARIS GREEN—A few orders have been shipped this week. Prices remain: Drums, 13½c.; packets, 14½c.

LINSEED OIL—As last quoted: Raw, 41c.; boiled, 44c.; 5-bbl. lots, 1c. less.

TURPENTINE—Prices of last week are being adhered to: 45c. in single bbls. and larger lots 44c.

VARNISHES—Unchanged.

SEAL OIL—Continues quiet at 42 to 44c.

COD OIL—Quiet, at 31c.

NAVAL STORES—Steady. We quote as follows: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There has been a fair week's business in glass. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Unchanged. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

Chemicals are active and steady. We quote as follows: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do.

roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Hides are firmer at 8 to 8½c. for No. 1, 7c. to 7½c. for No. 2, and 6 to 6½c. for No. 3.

PETROLEUM.

In sympathy with the decline of the United States article last week, Canadian petroleum has declined ½c.. We quote: Canadian, in car lots, 13c.; smaller quantities, 14c.; American prime white, car lots, 16½c.; smaller, 17c.; water white, car lots, 18c.; smaller, 19c.; Pratt's astral, car lots, 20c., and smaller, 21c.

COAL.

Steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

TRADE NOTES.

The white lead grinders have at last been compelled to advance their prices 25c.

There have been no arrivals of cement during the past fortnight and stocks are very light.

Canadian petroleum has been marked down ½c. per gallon to meet last week's cut in American.

The price of iron pipe having advanced sharply across the lines and makers here being full of orders, jobbers have advanced their prices this week very materially.

ONTARIO MARKETS.

TORONTO, Aug. 13, 1897.

HARDWARE.

TRADE remains in about the same condition as it was last week. Nice orders are still coming in in general hardware. In sporting goods the demand is brisk; enquiries for prices are coming in quite freely. The trade in heavy hardware has fallen off somewhat, as also in tinware and japanned ware, although some dealers report trade yet steady in these latter lines. The metal trade is considered fair, especially so in regard to galvanized iron, black iron

and tin plate. Plumbers' supplies are also moving quite freely. Harvest tools continue to have a steady, active demand. Taking it as a whole, however, business has assumed the dull tone of the summer trade. Nails and screws are only steady.

BARB WIRE—Trade is very quiet. We quote: \$2.20 f. o. b. Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—Demand is quite slack and hardly any shipments are being made. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE.—Nothing doing. Discount, 30 per cent.

WIRE NAILS—Dealers have experienced a slight improvement in demand. There has been no change in prices. When quoting freight classification must always be consulted. The ruling idea as to base price is \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—A steady slow trade characterizes this line. We quote as follows: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—Trade is quite active; orders are coming in freely. Discount, 50 per cent.

HORSESHOES—The increase in activity noted last week has been well maintained. There is no change in prices. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Trade only moderate. A falling off is noted. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—There is not much doing. Discounts are 12½ per cent.

BOLTS—While trade is good, business is not as brisk as it has been. Discounts remain the same. Discounts are: Common

Binder Twine.

HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

MANSARD SHINGLES



The Mansard Shingles make a very neat and ornamental covering for mansard roofs, and, when laid, all nail heads are covered.

GUARANTEE

Given with the

“EASTLAKE”

“EMPIRE” AND

“THORN’S” Patent Steel Shingles

AND THE

“OWL BRAND”

of Galvanized Corrugated Iron

WE GUARANTEE that the above named brands of roofing are made of better material, and will last longer, than those made by any competitor—providing our instructions sent with each order are carried out. We further guarantee that the “Eastlake” Patent Shingles can be laid quicker than any other metallic shingle. The “Empire” Patent Shingles have been on the market since 1882, the “Eastlake” since 1885, and the “Broad Rib” since 1891, and have been thoroughly tested. We always lead; we never follow.

The Metallic Roofing Co. of Canada, Limited

Incorporated under Dominion Charter
4th of April, 1885.

MANUFACTURERS TORONTO.

bolts, 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and 5-16, 70 per cent.; ditto, $\frac{3}{8}$, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, $\frac{3}{8}$ and larger, 4c. per lb.; 5-16, 5c. per lb., $\frac{1}{4}$, 6c. per lb.

RIVETS AND BURRS—A strong demand characterizes the trade. Tinned and coppered are receiving more attention during the last couple of weeks than they have been. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Are going out freely. Discounts are 17½ per cent.

ROPE—Trade remains about the same as it was. With the exception of those sizes used for hay forks there is not much doing. We quote: Sisal, 7-16 in. and larger, 5½c.; $\frac{3}{8}$ in., 5½c.; $\frac{1}{4}$ and 5-16 in., 6½c.; 3-16 in., 7½c. Manilla, 7-16 in. and larger, 7½c.; $\frac{3}{8}$ in., 7½c.; $\frac{1}{4}$ and 5-16

in., 8½c.; 3-16 in., 8½c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Orders are not frequent. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Nothing new has developed during the week. Trade is still quiet. We quote: “New Leader,” \$30 per dozen; “Royal Canadian,” with brass corners, \$29.50.

HARVEST TOOLS—The demand is principally for snaths and grain cradles, which are yet almost unprocurable. The manufacturers’ stock is about exhausted, and the season is too far advanced to make up any further quantity. Discounts are 60 and 10 per cent.

SPADES AND SHOVELS—Trade is only steady. There are no special features to report. Discount, 45 and 2½ per cent.

BUILDING PAPER—The demand has fallen off somewhat. Prices are unchanged. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—Business keeps fair. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—The trade in tinned and granite

ware is inclined to be slow. A slackening in the number of orders is quite noticeable.

HINGES—Shipments are still quite numerous. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CUTLERY—Trade is improving. Early fall orders are coming in and the demand is fairly active.

SPORTING GOODS—Business appears to be increasing rapidly. Enquiries in regard to prices are coming in freely.

POULTRY NETTING—There is nothing to note. Discount, 67½ per cent.

GREEN WIRE CLOTH—Trade is only steady. We quote \$1.35 per 100 square feet.

GARDEN HOSE—Still some shipments are being made, but the demand is falling off. We quote: Standard brands, 72½ per cent.; “Competition,” or “Trade,” 77½ per cent.

CEMENT—Trade in the city has perceptibly slackened the last couple of weeks. Several large buildings being supplied are being delayed in erection owing to inability of other manufacturers to keep up the required supply. This only is spoiling the hitherto good trade. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian

hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The trade is considered fair. Iron pipe is moving out freely and galvanized iron, black iron and tin plates are receiving considerable attention. The prices in iron pipe have been advanced 5 per cent.

PIG IRON—It is reported that considerable Canadian product is changing hands. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75 for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—Trade has materially improved. Many enquiries are reported. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—The trade is quiet and featureless. We quote \$2.20 per 100 lbs.

SHEET STEEL—There has been a nice business done during the week, both in higher grades and ordinary quality. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Shipments are frequent. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The demand has slightly increased during the week. Shipments from stock have been larger, and import orders are still freely booked. We quote: Queen's Head (case lots), 16 gauge, 3½c.; 18 to 24, \$3.87½c.; 26, 4½c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅛ to ¼c. per lb. higher than figures named.

TINNED IRON—Quiet and featureless. We quote as follows: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6⅞ to 7⅞c. per lb.

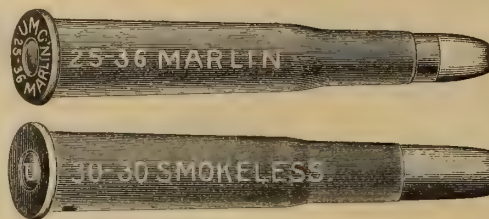
LEAD PIPE AND TRAPS—The trade is without feature. Orders are for small lots only. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

STANDARD of
AMERICA
for
30 Years



NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World.

The Marlin Model 1893



in addition to being made for the 32-40 and 38-55 cartridges, is made of special steel to take our high power cartridges, the 25-36 and 30-30 smokeless.

The 25-36 has a 117 grain metal patched bullet with soft lead point, smokeless powder, or a 106 grain metal patched bullet with soft lead point, black powder.

The 30-30 has a 160 grain bullet, either full metal cased or metal patched, with soft lead point, smokeless powder.

If you desire, you can reload the ammunition to suit your purposes, using black powder and a lead bullet with a proper alloy of tin. Cartridges are also ready with light loads for gallery and short range.

Made
in all Styles.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.



To Whet a Scythe...

properly requires a good
Scythe Stone.

Pike's **BLACK DIAMOND**
WHITE MOUNTAIN and
INDIAN POND

are positively
the best on earth. **Scythe Stones**

Pike's **Lilly White Washita OIL-STONE**
has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

SOIL PIPE—The demand is steady. Discount is 60 and 10 per cent.

PIG LEAD—The trade is inclined to be quiet. A few large orders have been received, however. We quote ton lots at 3½c. per lb., and in smaller quantities at 3⅞c. per lb.

INGOT TIN—While orders are coming in freely, they are only for small quantities. Prices are firm. We quote 16¼ to 16½c.

INGOT COPPER—Quiet and featureless. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER—Very little doing. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Some good orders have been received this week. Prices have advanced about 5 per cent. We quote now: Wrought, ¼ to ¾ inch, 1⅞c.; ½ inch, \$2.20 to \$2.25; ¾ inch, \$2.65 to \$2.70; 1 inch, \$3.60 to \$3.65; 1¼ inch, \$4.85 to \$4.95; 1½ inch, \$6.20 to \$6.30; 2 inch, \$8.35 to \$8.50; galvanized, discount 60 per cent.

RANGE BOILERS—Business continues moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal.,

\$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Shipments from stock are more numerous. A large number of shipments will reach destinations this week on through bills. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$2.85.

TIN PLATES—Trade has been good. Quite a quantity is being required for roofing purposes. We quote as follows: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Trade is about the same as last week. Nothing special has developed. We quote: ¼ in., 4⅞c.; ⅜ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—There is a fair demand with no change in prices. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

TERNE PLATES—There has been quite a number of shipments made this week. We quote: IC, \$6.25 to \$6.50; IX, \$8.

SOLDER—Trade is still fair. We quote: Standard, 10½c.; strictly pure, 11c.

ANTIMONY—A slight improvement is to be noted this week. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

OLD MATERIAL.

There has been no noticeable change in the conditions prevailing during the week. Although the demand is quite slack, yet dealers still hope that the trade will soon brighten, and a good fall business will ensue. During the week all metals, but particularly copper, have risen in England. The rise has had no effect on the Canadian market, however. The rag trade continues quiet, and not much of the finer metals is moving. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 7¾ to 8¼c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 5½c.; heavy red scrap brass, 6¾c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to 3¼c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c per 100 lbs.

GLASS.

Glass continues to be in surprising demand. Enquiries for double diamond are particularly frequent. Plate glass is also

wanted. Everything considered, the fall trade, which comes on in a couple of weeks, promises well. Stocks are all complete now. First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

Although the dull season is on now business is better than it was this time last year. Orders for fall trade are beginning to arrive, and the outlook for a heavy trade is promising. Quite a large quantity of oil and turpentine has moved this week, doubtless on account of the expectation of higher prices. This week turpentine took a big drop in the south, and there is now a probability of a decline in Toronto. The feeling in linseed oil is also easy. Red lead continues high in price. There is considerable movement in English and Canadian varnishes. White lead has advanced 20c. all round in sympathy with the rise in Montreal.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.35; No. 1, \$4.97½; No. 2, \$4.60; No. 3, \$4.22½; No. 4, \$3.85; dry white lead in casks, \$4.70.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

SULPHATE OF COPPER—In 300-lb. casks, 5c. per lb.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 9c. per lb. and 10c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

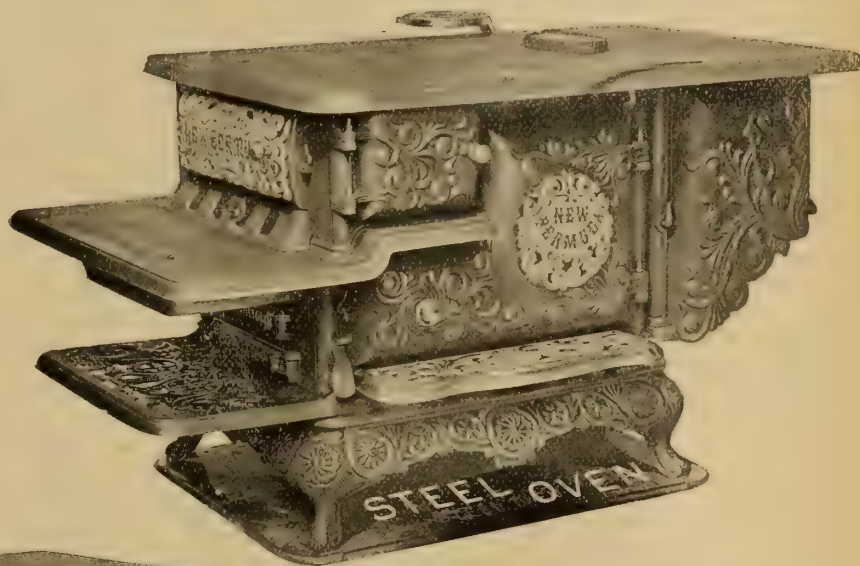
PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders

New Bermuda

9-26.—Takes 28-inch Wood.

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



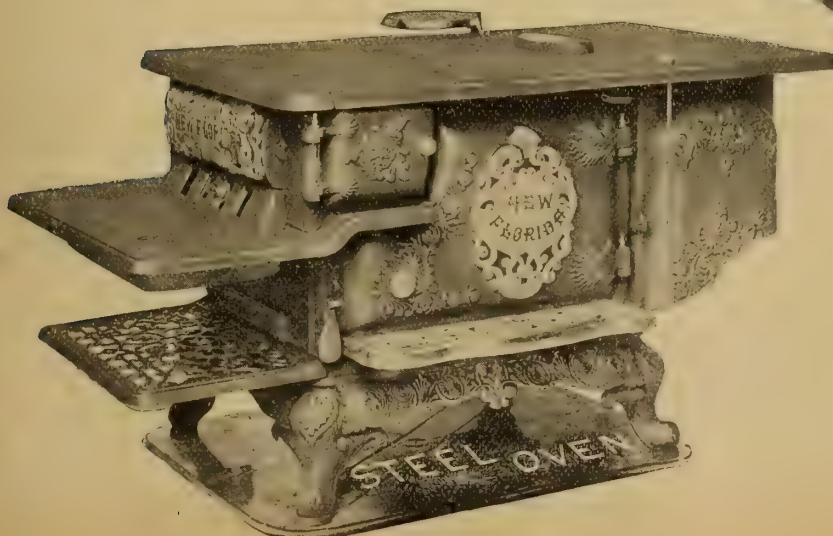
New Florida

9-24.—Takes 27-inch Wood.

POSSESSES all the features of utility and convenience which have made the "Florida" so popular with both dealers and customers during past seasons

Manufactured by...

The D. MOORE CO. Limited
Hamilton, Canada
Write for
New Supplementary Catalogue.



in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12 1/2-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 41c.; boiled, 1 to 4 barrels, 44c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 43c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

COAL.

Business is much about the same as it was a week ago. There is not much going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

HIDES, SKINS AND WOOL.

HIDES—Business has yet the unhealthy aspect that has characterized it for some time. Cowhides: Dealers pay 8 1/2c. for No. 1, 7 1/2c. for No. 2 and 6 1/2c. for No. 3. Steerhides: 60 lbs. and up, 8 1/2c. for No. 1, 7 1/2c. for No. 2 and 6 1/2c. for No. 3.

CALFSKINS—Trade is only moderate; prices, however, are firm. No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 50c.

WOOL—Arrivals continue to be inadequate to lessen the price. Dealers are still paying 19 to 20c.

PETROLEUM, ETC.

Lubricating oils have been in heavy demand during the whole of the week. Some larger fall orders have also arrived this week. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14 1/2c.; carbon, safety, 16 1/2c.; Canadian water white, 17c.; American water white, 17 1/2c.; Pratt's astral, 17c. in bulk.

MANITOBA MARKETS

WINNIPEG, Aug. 12, 1897.

OUR hot weather has held up at last, and we are getting a breathing spell. Some fears were entertained that the excessive heat might injure the crop, but so far no damage is reported. Farmers in this province are, according to some prophets, always between "the devil and the deep sea." If the season is cool there is not going to be enough heat to ripen the grain before the frost comes, and if it is very hot the grain is going to be shrivelled up before it is half grown, but still the farmers manage somehow to get a crop, and as long as we can ship, as we did last year, 26,000,000 bushels of grain, the country is not far wrong. There is an indication of a possible shortage of twine, but the knowing ones

state this is a false alarm, due to the fact that dealers, expecting twine on the free list next year, are endeavoring to have no stock to carry over. The price of twine runs from 5c. up, according to age and quality. In hardware, the trade is fairly good, and in paints and oils the market is steady and brisk. Binders are still selling freely throughout the country, and the machine expert grows a familiar figure on local trains. Prices show little, if any, change during the week, and run about as follows:

CANADA PLATES—Garth and Blaina, \$3.25.

GALVANIZED IRON—American, 20 gauge, \$4; 22 and 24 gauge, \$4.25; 26 gauge, \$4.50; 28 gauge, \$4.75 100 lbs.

IRON PIPE—Is quoted as follows per 100 feet: 1/4-inch, \$2.50; 3/8-inch, \$2.75; 1/2-inch, \$3; 3/4-inch, \$4; 1-inch, \$5; 1 1/4-inch, \$7; 1 1/2-inch, \$8.50; 2-inch, \$11.50.

LEAD—Pig, per lb., 4 1/2c.

SHEET ZINC—In casks, 6c. per lb., broken lots, 6 1/2c. per lb.

SOLDER—Half-and-half (guar.) per lb.; 14 to 16c.

AMMUNITION—Cartridges, rim fire pistol, American, discount 40 per cent.; rim fire cartridges, Dominion, 50 and 5; rim fire military, American, net list; central fire pistol and rifle, American, 12 per cent.; central fire cartridge, Dominion, 30 per cent.; shot shells, 12 gauge, \$6 to \$7.50; shot, Canadian, soft, 5 1/2c.; shot, Canadian, chilled, 6c. Robin Hood powder, 17-lb. kegs, \$10; 1/4 kegs, 4 1/4 lbs., \$3; canister, 9-oz., 60c. Loaded shells, 12 gauge, soft shot, \$18 per 1,000; No. 10 gauge, \$20.70 per 1,000.

WIRE—Galvanized barb wire, \$2.60 to \$2.70 100 lbs.; plain wire and staples, \$2.75 to \$2.80.

ROPE—Sisal, lb., 6 1/4 to 6 1/2c. base; manilla, lb., 7 3/4 to 8c. base; cotton, 1/4 to 1/2 inch and larger, 16c. lb.

AXES—Per box, \$6 to \$9.

NAILS—Cut, keg, base price, \$2.50 for 20 to 60d., with new classification of extras; common steel wire nails, 4 1/2 to 6 inch, \$2.65 per keg, with usual extras for smaller sizes.

HORSE NAILS—Pointed and finished oval heads. List price as follows: No. 5, \$7.50 box; No. 6, \$6.75 box; No. 7, \$6 box; No. 8, \$5.75 box; Nos. 9, 10 and 11, \$5.50 box. Discount off above list price 45 per cent.

TIN—Lamb and Flag, 56 and 28-lb. ingots, per lb., 19 to 20c.

TIN PLATES—Charcoal plates, I. C., 10 x 14, 12 x 12 and 14 x 20, \$4.50 to \$4.75; I.X., same size box, \$5.75 to \$6; I.C. charcoal, 20 x 28, 112 sheets to box, \$8.50 to \$9; I.X., box 20 x 28, 112 sheets, \$10.50 to \$11.

TERNE PLATES—I.C., 20 x 28, \$8.50 to \$9.

IRON AND STEEL—Bar iron, 100 lbs., base price, \$2.10; band iron, 100 lbs., \$2.65 to \$2.75; Swedish iron, 100 lbs., \$5.25 to \$6; sleigh shoe steel, \$3 to \$3.25; best cast tool steel, lb., 9 to 11c.; Russian sheet, lb., 12 to 13c.

SHEET IRON—10 to 20 gauge, \$3; 22 to 24 and 26 gauge, \$3.25; 28 gauge, \$3.50.

PAINTS, OILS, VARNISH AND GLASS.

WHITE LEAD—Pure, \$5.75 100 lbs.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, 5 1/2c.; yellow ochre, in barrel lots, 2 1/2c.; less than barrels, 3c.; golden ochre, barrels, 3 1/2c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, 3 1/2c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, 2 1/2c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, 4 1/2c. per lb.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown japan, \$1; house-painters' gold size, japan, \$1.50; coach painters' do., \$2 to \$2.25; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

SUNDRIES—Glue, S. S., in sheets, per lb., 12 1/2 to 15c.; glue, white, for kalsomin-ing, 16 to 25c.; stove gasoline, per case, \$4; benzine, per case, \$4. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$7. Portland cement, per barrel, \$4 to \$4.25; plaster, per barrel, \$3.25; plasterers' hair, P.P., 90c. per bale. Putty, in bladders, barrel lots, 2 1/2c. per

SITUATION VACANT.

WANTED—BOOKKEEPER TO GO TO WESTERN town, one who has had experience in the hardware business. Reply, Box 7, HARDWARE AND METAL. (33)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

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Telephone 689.

Cable "LeVesconte" Toronto.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.



"BUILD TO-DAY THEN,
STRONG AND SURE.
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

DO YOU?

WISH THUS TO BUILD
an
advertisement
in the
CONTRACT-
RECORD.

TORONTO
will bring you
tenders from the
best contractors

lb.; do., in 100 lb. kegs, $2\frac{3}{4}$ c.; do., less than barrels, per lb., 3c. Alabastine, cases of 20 pkgs., \$6.50 to \$7.50, as to color.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

LINSEED OIL—Raw, gal., 50c.; boiled, gal., 53c. in barrels; less than barrels, 5c. gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, 55c.; less than barrels, gallon, 58c. An additional charge for packages for small quantities.

OILS—Range about as follows: Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 11c. per lb.; tanners' or harness oil, 65c.; neatsfoot oil, \$1; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

REFINED PETROLEUM—Prices here are as follows: Silver Star, $18\frac{1}{2}$ c.; Crescent, $22\frac{1}{2}$ c.; oleophene, $23\frac{1}{2}$ c. in barrels. Car lots, 1c. per gal. less. United States oils in barrels are quoted at 27c. for eocene and 24c. for sunlight.

UNITED STATES MARKET.

NEW YORK, Aug. 13, 1897.

PIG TIN—London advices by cable indicated quite heavy dealings in the foreign market and quoted slightly lower prices. There were no signs of purely speculative operations in the New York market, however, and business outside of the speculative was of very ordinary character. 'Change contract quotations were bulletined lower, but actual tin was sold at little if anything under 13.85 to 13.90c. f.o.b. in five ton lots or under, and 13.95 to 14.00c. f.o.b. in smaller quantities. The arrivals here have been small latterly, and the position of spot supplies is doubtless better than it was at the beginning of the month, with the bulk of tin in few hands.

COPPER—Nothing more definite than was noted yesterday came out regarding good-sized contracts for either home trade or export account, but circumstantial evidence that considerable business is passing quietly at intervals is not wanting. Prices are holding fairly firm, at $11\frac{1}{8}$ to $11\frac{1}{4}$ c. for Lake Superior ingot, $10\frac{3}{8}$ to 11c. for electrolytic and $10\frac{3}{8}$ to $10\frac{1}{4}$ c. for ordinary casting stock.

PIG LEAD—Outside of ordinary movement of carload and smaller lots, for prompt delivery, there is very little business at the moment, and the market presents a dull, uninteresting appearance. Prices are slightly uncertain, as not unusual under circumstances such as exist at present, but $3.72\frac{1}{2}$ to 3.75 c. would seemingly be a fair reflection of trading basis. London cable quoted £12 10s. for soft Spanish.

SPELTER—Standard western brands are still quoted at 4.30 to 4.35c., delivered here or at common point, and the market is ap-

parently firm in tone. There is no sign of anything more than very ordinary buying or demand, however, in this quarter. London cable quoted £17 5s. for good merchant brands.

ANTIMONY—There is little business outside of ordinary jobbing movement and prices remain at 7 to 8c., according to quantity and brand.

TIN PLATE—There is a slightly steadier tone to the market for American plate, and prices are about $2\frac{1}{2}$ c. up from the lowest point, on the strength of better orders from various points, in which deliveries up to the end of July were said to have been involved. Spot business is of retail character.

IRON AND STEEL—There is very little contrast with the dull condition of business that has prevailed in nearly all departments since the beginning of the month and prices remain without important variation.

THE APPLICATION OF THE STEAM TURBINE.*

THE steam turbine has been developed into a motor, which utilizes steam with a high degree of economy. It possesses considerable simplicity, and as its speed of revolution is high, and it runs with perfect steadiness, it is manifestly a suitable motor for the driving of dynamos and alternators. The first compound steam turbine directly coupled to a dynamo was constructed in the year 1884. It ran at 18,000 revolutions per minute, and gave six electrical horse-power; successive improvements were introduced, and it was further adapted to condensing. Within the last five years, direct couple turbine dynamos and alternators of 500 to 700 electrical horse-power, both condensing and non-condensing, have been constructed and put to work and at the present time above 30,000 horse-power of these motors are at work in England.

The Compound Steam Turbine.—The compound steam turbine of the "parallel flow type" consists of a series of parallel flow turbines set one after the other on the same shaft, so that each turbine takes steam from the preceding one, and delivers it to the next. The steam entering by an inlet all around the shaft, passes through the successive turbines of gradually increasing area of passageway, and is expanded by small increments of volume at each turbine, till it arrives at the next series of turbines; these are of larger diameter and consequently greater peripheral speed and capacity, and they allow of further gradual expansion. The steam then flows to the last series of turbines, where, the expansion being completed, it passes to the exhaust pipe. The rows of turbine blades are formed of hard brass, and accurately shaped; those keyed into the shaft project outwardly and

nearly touch the case; those keyed into the case project inwardly between the moving rows and nearly touch the shaft. The turbines are so proportioned that the steam passes from one row to the next throughout the entire turbine with the most suitable velocity for economical working under the prescribed conditions. On the right are the dummy or rotating pistons to balance the end pressure of the steam. In the compound steam turbine of the "radial flow type" the rows of turbine blades are keyed into and project from the faces of moving discs attached to the shaft and fixed discs attached to the casing. The course of the steam is outwards, through the rings of blades; then inwards and again outwards through the blades on the succeeding disc, and so on, and the expansion is completed in passing outwards through rows of turbine blades on both sides of the large disc. The end pressure is here, as in the case of the parallel flow type, balanced by a revolving piston. The bearings are of special but simple construction. Around the bush in which the shaft revolves are placed three concentric loosely fitting tubes truly bored and centred; the action of these tubes being to form concentric extremely thin layers of oil around the shaft, which act as a cushion and prevent hammering or vibration of the shaft arising from any small errors of balance that may be present in the moving parts. The bearings are kept continuously supplied with oil by a pump, and in the case of large plants an oil cooler is fitted through which the pump forces the oil to the bearings. Generally the bearings are fed from open oil boxes, but sometimes they are closed, and the oil forced in under considerable pressure.

The Governor.—The governor chiefly used has been one in which the steam admission valve is worked by a steam relay, the valve of which is controlled by a solenoid, and the action has been rendered more sensitive, and the economy of the motor at light loads improved, by superimposing a reciprocating motion to the position of the relay valve, the action being to eliminate friction and stop hunting, as well as to admit the steam in blast at full pressure, and of larger or shorter duration, according to the work required from the motor. In some cases the solenoid has been replaced by a centrifugal governor of ordinary type.

The advantages of the turbine for driving dynamos and alternators may be summarized as follows: (1) Smaller first cost of plant; (2) smaller cost of building and foundations; (3) smaller cost of upkeep; (4) reduction of engine room staff, the machinery being smaller and lighter, and more easily managed and controlled; (5) ease and rapidity of running up plant; (6) impossibility of injury of turbines through priming; (7) a total absence of grease in the exhaust steam or condenser; (8) the smaller first cost of plant, especially in the larger sizes, enables more spare plant to be kept ready suitable for the load, and consequently affecting a considerable saving of coal; (9) a small consumption of steam at average load in the larger sizes, and abnormally so in the large size of the condensing types; (10) greatly diminished vibrational disturbance to the ground and building, owing to the absence of reciprocating parts.—Age of Steel.

*A paper read by Charles Algernon Parsons before the Conference of British Institute of Civil Engineers.

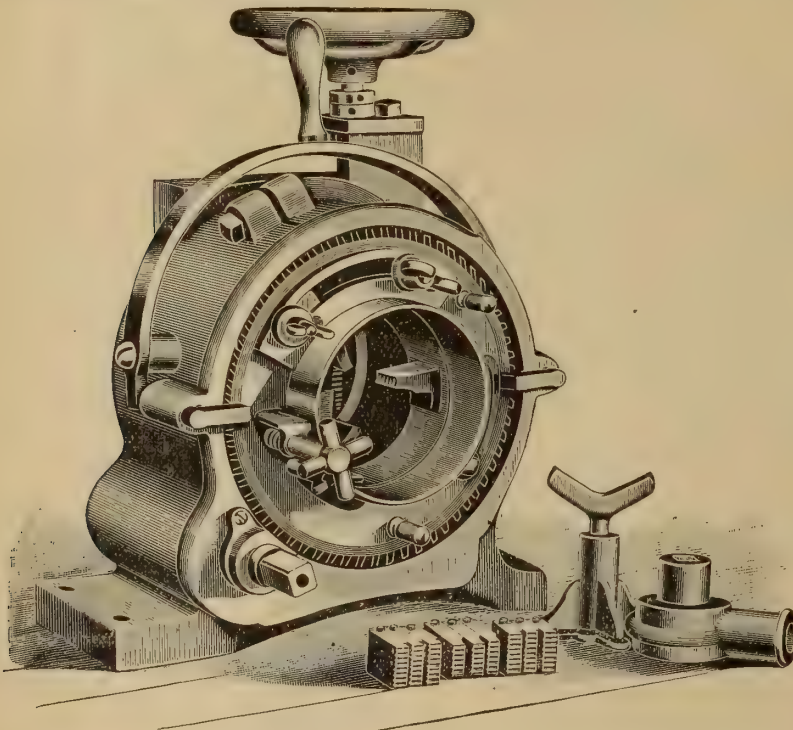
Plumber and Steam-Fitter

IMPROVEMENTS IN THE FORBES' PATENT DIE STOCKS.

In the bicycle business, one naturally expects a new model wheel to be put out every season, which practically compels one who wishes to be up to date to purchase a new one every year. In other trades the custom is different. Changes and improvements are constantly being made in standard machines

the gear became worn the pressure of the feed coming in only one place on its surface would tend to tip the gear slightly, which would prevent the dies from tracking and thus produce a "drunken" thread. Especially was this so when the dies became dull and considerable pressure was necessary in starting the thread. With the double pressure system, shown in the cuts,

in the cut, with which any wear can be taken up and the gear always kept a good working fit in the shell. This they consider very important as it is greatly increases the life of the machine. This adjustment can also be applied to old machines, making it possible to repair them at much less expense than formerly. Curtis & Curtis have covered these improvements with patents, which will amply protect them from the many imitations on the market of their design of machines.



No. 44 Hand Machine. Range, 1" to 4", R. & L.

from time to time, often at great expense to the manufacturer, and but little is made of it. This is illustrated by the case of the Forbes' patent die stock, manufactured by Curtis & Curtis, of Bridgeport, Conn. The machine is too well known to the pipe-fitters throughout the country to require a general description, so we will confine ourselves to the improvements which have recently been added to it. These machines have been manufactured since 1882, and, like all machines that are up to date, they have constantly been improved from time to time. Among the most recent improvements is the double pressure bar. Formerly the pressure feed pressed on the die-carrying gear in only one place. This worked well as long as the machine was new and the gear a close fit in the shell. But experience taught that after

the pressure is applied at two points on the face of the gear opposite each other, which prevents the gear from tipping, no matter how strong the pressure or how large the gear may be in the shell.

Another change which the firm considers very important is the adjustable shell. The great trouble with all machines made in this style, viz, a die carrying gear surrounded and supported by a casing, is that sooner or later the gear will wear itself loose, it being immaterial whether the gear teeth bear on the inside of the casing or not, thus making a loose fit and rendering the machine useless. Heretofore when this occurred, it was necessary to supply either a new shell or a new gear, either of which was expensive.

On all sizes of their machines they now put an adjusting screw on the shells shown

MONTREAL MASTER PLUMBERS.

The regular meeting of the Montreal Master Plumbers' Association was held in the St. Joseph Hall, Thursday evening, August 5, President P. S. Carroll in the chair.

Mr. James Atchison was elected as a member of the association.

Mr. Verville and Mr. Peard were delegates from the Journeymen Plumbers' Association, in the interests of their picnic, which is to be held at St. Rose, Saturday, August 14.

It was moved by Mr. Denman, seconded by C. E. Thibault, "That all the master plumbers be requested to close their establishments on the 14th inst. and attend the picnic with their families." It was also decided to make Friday pay-day. It was further ordered that the resolution be printed and a copy sent to all the master plumbers, wholesale dealers and the press.

A letter was received from Mr. MacLaren, of the Toronto Radiator Co., expressing his desire to help the association in every way that he could, and the secretary was instructed to acknowledge the receipt of the same.

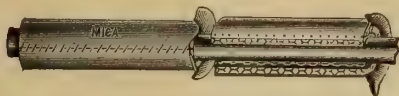
CONDENSATION IN PIPES.

The statement has been made that each foot in length of two-inch steam pipe under pressure costs \$1 a year in condensation. This statement, says an exchange, has several times been called into question, but a little figuring will show that it is not far from the fact. Recent experiments show that with a difference of 269 degrees between the temperature of the steam in the pipe and that of the surrounding air each square foot of bare pipe condenses .85 of a pound of steam per hour. A foot of two-inch pipe

T. L. Paton.

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H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.
Wholesale trade only.

MICA PIPE COVERING

Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

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PORTLAND CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
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Large Stocks.

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W. McNALLY & CO. - MONTREAL

contains about a half a square foot of surface, so that each foot of two-inch pipe would condense .425 pounds of steam per hour. Multiply this by 8,760 hours in a year and you would obtain 3,723 pounds of steam which would be condensed by the pipe, and allowing an average evaporation of seven pounds of water per pound of coal, it would take 532 pounds of coal to furnish the steam. This would be worth \$1 if coal was about \$3.75 per ton, which is not an exorbitant price in the eastern manufacturing cities.

PLUMBING CONTRACTS.

Purdy, Mansell & Mashinter have the contract for the plumbing of the Carmelite Monastery at Niagara Falls.

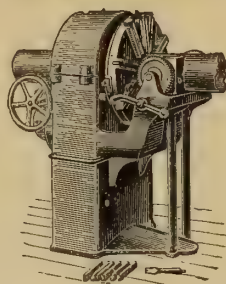
Messrs. E. Jackson & Son, Windsor, N. S., have secured the contract for the plumbing, heating and ventilating from the contractors, Messrs. McIntosh & McGregor, of Stellarton, for the new school house or academy there. When completed it will be one of the finest buildings in the province.

PUTTING ON THE BRAKES.

THE arrest of motion in mechanical devices is a science. We can halt a fly-wheel, stop a circular saw, bring a locomotive to a standstill, reverse the course of a steamship, and, in fact, put the brakes on everything but a cyclone, a scandal, the vomit of a crater or the wheels of time. In the motion of our bodies the art

Armstrong Pipe Threading AND CUTTING-OFF MACHINES

(Hand or Power.)



Armstrong Adjustable Stocks and Dies,
Vises (hinged), Wrenches, Pipe Cutters,
Clamp Dogs, etc.

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GLASS GAUGE
GASKETS, RINGS, BUMPERS.
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SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

of stopping is essential to our bodily safety, otherwise we might walk into a well, a tank of hot water or a hornet's nest. When a blind man puts both his feet over the edge of a precipice, his only stopping place is at the bottom, and a hod-carrier who steps over the edge of a scaffold can call no halt on his descent to broken bones and the coroner.

While the average man knows enough to keep his fingers out of boiling water and his hands from the tip of a live electric wire and the wrong end of a wasp, he is apt to go over the safety line where the consequences are more serious than a fracture in his bones or a crack in his head. How few of us know anything of putting on the brakes when the tongue runs away from truth and good sense. For reasons that are something more than anatomical the tongue is placed behind closed doors. It is also wisely endowed with the faculty of getting tired, and where nature has been generous in giving us two eyes and two ears, the dual arrangement stops at the tongue. The line is drawn on our vocal member. It is sufficient for its duty, and would seldom, if ever, put in any overtime if we knew when to put on the brakes. In business a long tongue is a misfortune. It can talk a customer to death and is very apt to frustrate a sale by overreaching the truth. Some men of special lingual endowments can invest a plain flat-iron with the beauty of an enamelled tile, and can cover an awl, a bodkin or a gimlet

with the glory of a gold pin. This may be one of the special qualities of a salesman, but, as a rule, the man who pays for terrapin and discovers he has only secured a clam is not likely to repeat his mistake. An oratorical Ananias is a misfortune in any business. He may be an artist in painting sparrows and selling them for canaries, but birds of this kind generally come home to roost. Loquacity in business is as much out of place as is a bell on a cat.

In the pursuit of wealth, which, by the way, is as reasonable as climbing a tree for an apple or digging in the earth for a potato, if we knew when we had enough of gold, or land, or houses, or mines, how few of us would be losing sleep, flesh, health, sanity and life itself in loading up our backs with more than we can carry! When we break a bottle to pour in more wine, we are not a mile away from the fever that burns in a gambler's bones or the brain disease that afflicts a lunatic. The lust for wealth is as deadly in a man as is the lust of empire fatal to a nation. In the one case we may become a juiceless mummy in a palace and in the other a dead Arab among the grapes of a stolen vineyard. The inequalities of wealth that are disturbing society and sapping its foundations would never be abnormal or prodigious if men knew when to put on the brakes.

Aside from the lust of wealth, and, in fact, a vice at the opposite end of the plank, we have the man who never knows when to

stop burning money. He may light his cigar with a \$100 bill or he may be incapable of taking care of a hard-earned dime—it matters not, it is the same vice. The spend-thrift is not necessarily a fool with a bank account or a day laborer with all his belongings in a trunk. In both cases there is a leak—the one in a puncheon, the other in a keg. The one sinner may not be likely to be hungry, but the other is apt some day to be short in his rent and his bacon.

Some men are worse off with most means. A few hours overtime in a week and an extra dollar will start many a man into debt. His head swells as his pocket shrinks. Unable to feed a rabbit, he speculates on a horse, and, with the baker's bill unpaid for last week's bread, he brings a cake home in a wheelbarrow. It is certain that, as some men are amassing wealth by greed and cupidity, and are choking like mice in a cheese they can never consume, there are others who, by not knowing how or when to put the brakes on their spendings, are adding to the evils and the fools of which the world in the days of Noah had enough and the nineteenth century has too many.—Fred Woodrow, in *Michigan Tradesman*.

TEMPERING TOOLS.

AN experienced tool-maker, in speaking of tool-hardening, recently said to me that he often wondered why the machinist should have so much fear when he undertakes the hardening of an expensive tool. He said that experience had taught him never to complete the cooling of the tool in water, but to withdraw from the water just before the "sizzling" commenced to cease, and immediately immerse in oil. A can twelve inches in diameter holding eight or ten gallons of water and one for oil of the same size will take care of a piece of steel six inches long and three inches in diameter. Such a piece may be fairly heated in thirty minutes, but this heating should not be hurried and the blast should be avoided, particularly when the steel is red. The piece should be quickly pushed down through the water and then moved about until the "sizzling" commences to cease, as before remarked. No mistake should be made about this. It should then be plunged into the oil and allowed to remain until it is cool; or, if it is removed from the oil while it is still warm, it should on no account be placed on a cold surface unless such surface is a poor conductor of heat. This matter of dipping steel into cold water without lowering the temperature inordinately is purely a matter of the personal equation of the man. Some men will dip red-hot steel into water repeatedly without causing a greater variation of temperature than 60 deg., while

others cannot appreciate less than 200 deg. In other words, if the temperature best suited to the steel is 1,600 deg., there are a few men who will come within 30 deg. on one side or the other of it; while most men cannot appreciate more closely than 100 deg. on one side or the other. This being the case, the machinist should heat slowly and cool at as high a temperature as will surely harden; a method of procedure that cannot be too strongly rubbed into the heads of the men who are called upon to do this class of work.—J. H. Allen, in *Dixie*.

PAINTING IRONWORK.

THE painting of ironwork is one of the most neglected yet important factors in its preservation, and one to which the mechanical engineer rarely devotes much time or thought. The majority of specifications merely state that the ironwork is to receive one, two or three coats, as the case may be, ignoring entirely the quality of the paint. Perhaps the engineer is not wholly to blame for this, as the manufacturers of paint, like other vendors of special articles, puff their rival wares until everyone, except the expert, is quite at a loss what special paint to choose. As a general rule, price is the first thing which influences the choice of paint, after which comes color, and finally covering power. The preservative action is seldom considered, whereas if this were kept prominently forward we should have had exhaustive experiments on the subject and some consensus of opinion as to the proper paint to use for ironwork, one which would thoroughly preserve it under the most adverse circumstances, thereby saving the loss due to oxidation.

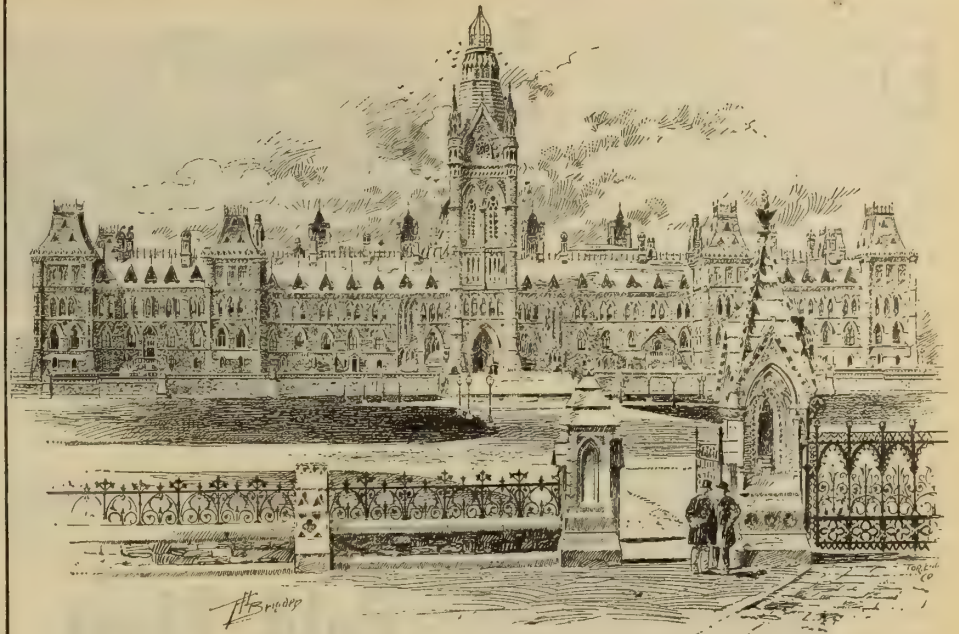
A paint to preserve ironwork should possess great firmness, good hardening properties; it should be elastic and expand and contract readily with the iron at varying temperatures. Of the best paints those most used are the oxide of iron and red and other colors of lead paints. Oxide of iron paints possess greater covering power than lead paints in the proportion of three to two. From some experiments which have been made with some of Wolston's Torbay oxide of iron paint it was found that on a surface of ten superficial yards it took for the first coat of oxide, 1 pound; for the second coat, 1½ pounds, and for the third coat, 2 pounds; whilst with the lead paint 1½ pounds were used for the first coat, 2½ pounds for the second coat, 3½ pounds for the third coat. The manufacture of what is known as the Torbay oxide paints is principally in the hands of two firms, the Torbay and Dart Paint Co. and the Torbay Paint Co.; these firms make it from the natural oxide found in abundance

at Brixham, South Devon. Oxide of iron paint is also made from natural oxide at Via Gellia, near Matlock, Derbyshire, and at many other places in the kingdom. The oxide is thoroughly pulverized, levigated and washed through a woven mesh, finally passing through a brass-woven mesh of over four thousand holes to the square inch. The pigment combines thoroughly with iron, entering minutely into its pores by reason of its extreme fineness. It is claimed by the makers of paint from natural oxides that these oxides possess some mysterious advantages over artificial oxides which have been obtained as by-products from chemicals, that the paints from artificial oxides do not possess good covering powers, that they have not the power of amalgamating with oil, and that they have an acid reaction which necessarily corrodes the iron. This may be the fact in some cases, but we have seen artificial oxide paints which have none of these disadvantages, and which have a decided alkaline reaction, thus equaling, if not rivaling, the natural oxide paint, and, being made from waste products, they are necessarily cheaper. A good paint for ironwork should be free from grit, uniform in quality, unchangeable under atmospheric influences, possess great covering powers, and be of an alkaline nature. The whole of these qualities can be tested by the ordinary painter under proper supervision, except the last, which requires chemical knowledge; and we should strongly recommend the users of paint for ironwork to test their paints in conjunction with a qualified analytical chemist who has made the subject his study.

Before painting the surface of galvanized iron it should be washed by an alkaline solution, as the galvanized iron frequently has a greasy acid surface when it leaves the galvanizing bath. In painting constructional iron work the wrought iron should be allowed to weather first before painting, as the oxide which forms on the surface of the iron when rolled will always sooner or later peel off, carrying whatever coats of boiled oil or paint there may be put upon it. We have seen this oxide peel off in flakes two feet and three feet square; we know that engineers are fond of specifying the iron to be oiled whilst hot from the rolls, and we have even seen it specified that castings should be coated with boiled oil whilst red hot. How the gushing engineer expected the castings to be fettled and cleaned before this operation we know not. A good coat of paint improves the appearance of a machine, bridge or roof, and although it may seem a minor matter, yet we believe there is money to be saved by careful attention to the quality and price of the paint used on iron work.—*Mechanical World*.

EXTRA HARD STEEL.

THE Engineer, of London, presents the following letter from Hiram Maxim : Some months ago Samuel Maxim, who is a farmer in Wayne, Maine, where the Maxim family have lived during the last 110 years, commenced certain experiments with a view of ascertaining how much truth there was in the statement that one often finds in ancient literature relating to the remarkable strength and hardness of Hindoo and Japanese steels. It seems that his experiments were crowned with success, for he wrote me a bantering letter telling me what he had done, and challenging me to send to him the hardest piece of steel I could find in England, and he would drill a hole through it, tie a blue ribbon through it and allow me to wear it as a decoration. I wrote back to him stating that we had many kinds of hard steel in England, and perhaps, after all, his steel was no harder than some well-known grades. In reply to this he sent me some specimens which he had drilled. One of these specimens was considerably harder—in fact it was the hardest specimen of steel that he could find. About that time it seems that an American newspaper reporter heard of the steel, and wrote up a very elaborate and sensational article. When this appeared my brother was very much disgusted, as the article gave him a lot of trouble; people also commenced to write to me on the subject. It was then that I wrote a letter to a well-known engineering journal, stating all I knew of the subject, thinking thereby to explain matters and so help me out. However, a certain thin-skinned individual at Sheffield evidently regarded my letter as an attack upon English steel, and he was up in arms in a minute. Then I was made the butt of some abusive letters and ridiculous criticisms. At the present moment I have been interviewed right and left regarding this steel. The more I say about it and the more I try to impress upon my interviewers that I do not have any steel for sale, the more they say about it, and my trouble is correspondingly increased. The facts of the case are simply these: Samuel Maxim has succeeded in making occasionally, not always, small slugs of steel which can be forged into drills, and which appear to me to be considerably harder than any steel that I have heretofore known. Whereas Vicker's extra special steel, Mushet's steel and some grades of French steels may be made into drills which will go through a $\frac{1}{4}$ inch file by being ground once, Samuel Maxim's steel will drill several holes without any apparent dulling of the drill. This is all I know about the much vexed question. The fact is, however, that the plain unvarnished truth is not sensational enough for some newspaper reporters. They exaggerate the facts until the whole thing appears ridiculous in the extreme.



New Customs Tariff

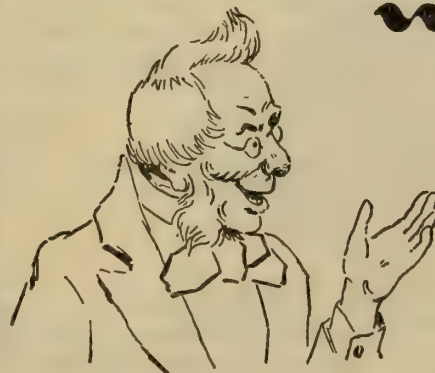
Alphabetically arranged and revised and corrected from the official copy as assented to by the Governor General, June 29, 1897, including the old Tariff by way of comparison.

Also comparative rates of the Dingley and Wilson (United States) Tariffs.

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Until we invented that Patent Bridle for Flat Painters' Brushes, painters were always complaining about the bulging in the centre, caused by the twine or wire binding, and the color WOULD WORK THROUGH. No complaint now from painters who use our Patent Bridle—absolutely none.

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

DON'T.

DON'T crowd your windows. We have latterly observed a tendency to overcrowding in the matter of window dressing. Whether this may or may not be attributable to the late celebrations we do not pretend to say, but for some months past we have noticed that decided crowding in this difficult branch of the hardwareman's business appears to be on the increase. We are convinced that it is a mistake, and urge our readers to strongly guard against it. We do not so much refer to special window displays of any one leading line, in which case a goodly number of the same article may in itself prove a decided attraction, as to the crowding of the window with far more samples of the stock that can fairly be seen. Don't forget that shop windows are not store-rooms, and remember that the passer by does not imagine your window displays a sample even of everything you sell. Good window dressing is not by any means as easy as fiddling, as our readers well know; they also know in what estimation a person is held who carries all his goods in his shop window. We urge our readers to remember this, and again enforce the doctrine that a window comparatively sparsely, but smartly, dressed and changed frequently, has a far better effect, and brings in more of the passing public than the overcrowded, rarely-changed jumble show, no matter how skilfully the jumble may have been arranged. Don't crowd!—The Hardwareman.

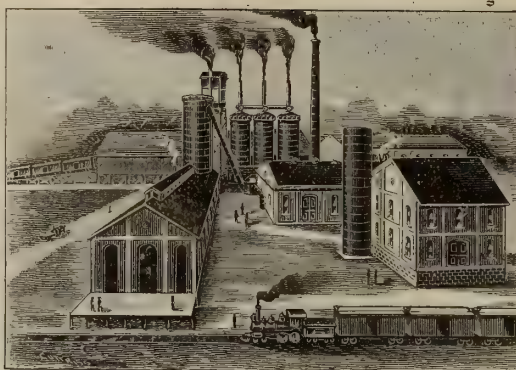
A COMPANY FORMED.

ARRANGEMENTS are about completed in regard to the forming of a joint-stock company to purchase and continue the business of the late Mr. William Buck of Brantford. Application for incorporation has already been made.

The applicants are: Alice Buck, the widow; George Buck, William E. Buck, Frederick Buck, Alice Turnbull and Annie Heyd. The style of the company is to be: The William Buck Company, Limited, and the business is to be continued in Brantford. The amount of the capital stock of the company is to be \$150,000 in \$1,500 shares of \$100 each.

Business men all over Canada who have had dealings with the company in its long existence will be pleased to learn that it is to be continued and is to be managed by directors who have had their schooling in the business itself, and who, having acquired a knowledge of the characteristics of business that won it such success, will continue on much the same lines.

The Dominion Flint Paper Co. claim to be turning out a much improved and superior paper. They have lately made some improvements in their plant and process of manufacture.



The Hamilton Blast
Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

**HIGH GRADE
PIG IRON.**

WHY IS IT **THE ROYAL**

Cold Blast Safety Lantern

IS SUPERIOR TO ALL OTHER MAKES?

Because it has a larger air chamber, causing a better combustion and producing a white steady flame which is wind-proof.

Because it HAS NOT a spring in the top of the Lantern which becomes useless on account of the heat taking the temper out of the wire.

Because the Globe is raised and lowered by the crank movement, dispensing with a tube down through the oil well, which causes the Lantern to leak after being in use a short time.

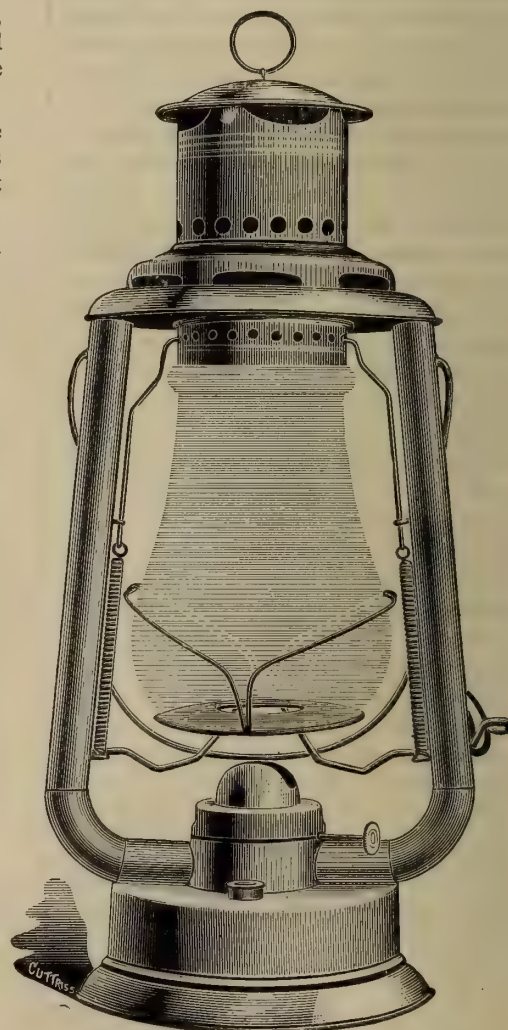
Because the "ROYAL" has a larger oil well and a larger feeder cap than other Lanterns.

ESPECIALLY adapted for Steamboats, Miners and Fishermen, and for use in exposed places. Gives double the light of an ordinary Lantern, and will Not Blow Out.

Patented in Canada and the
United States.

FOR SALE...

by leading wholesale Crockery and Hardware Merchants throughout the Dominion.



BANNER LAMP BURNERS ARE THE BEST.

OUTFIT FOR THE KLONDYKE.

Dixi H. Ross & Co., of Victoria, B.C., who style themselves Klondyke outfitters, have issued a list of supplies necessary for one man for one year going to the mines. The list is as follows:

Flour	400 lbs.	Stove	1
Corn meal, 2-10s	20 "	Gold pan	1
Rolled oats, 4-9s	36 "	Granite buckets..	2
Rice	25 "	Knives and forks..	1 each
Beans	100 "	Spoons ... 3 tea and 3 table	
Sugar	75 "	Quaker bread pan	1
Dr'd fruits (apples, peaches, apricots).....	75 "	Cups	2
Yeast cakes.....	6 pkgs.	Plates (tin').....	3
Candles.....	20 lbs.	Whet stone	1
Dry salt pork.....	50 "	Coffee pot.....	1
Evap. potatoes ..	25 "	Sleds	
Evap. onions ..	5 "	Picks and handles	1
Butter.....		Hatchet.....	1
Bacon.....	150 "	Saws, whip.....	1
Extract of beef (4 ozs.).....	1/2 doz	Saws, hand.....	1
Baking powder ..	10 lbs.	Shovels	1
Soda	3 "	Nails.....	20 lbs.
Salt.....	20 "	Files (assorted) ..	1/2 doz
Pepper	1 "	Axes and handles	1
Mustard.....	1/2 "	Draw knife.....	1
Ginger.....	1/2 "	Planes.....	1
Coffee	25 "	Brace and bitt ..	1
Tea	10 "	Chisels (assorted)..	3
Condensed milk ..	2 doz.	Butcher knife.....	1
Soap (laundry)...	5 lbs.	Compass.....	1
Matches ..can of 60 pkgs.		Revolver	1
Tobacco		Evap. vinegar... ..	1 qt.
Compressed soup		Rope (1/2 in.) ..	100 ft.
vegetables.....	10 lbs.	Medicine case....	
Jamaica ginger (4 oz.)	2	Pitch	
		Oakum.....	
		Fry pan	1

On the firm's envelope is this inscription:

REMEMBER—That Clondyke, Yukon, is in Canadian territory, and that all goods from the United States must pay duty at port of entry. Goods purchased in Canada enter free.

Dixi H. Ross & Co. are up to date.

DARK SPOTS FROM ALUMINIZED ZINC.

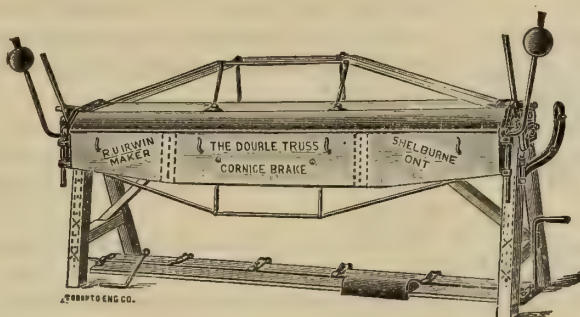
We have recently been asked if there is a lacquer or chemical treatment that will cover up or remove the dark spots which sometimes appear on castings containing aluminumized zinc.

In reply we would say that, in the first place, there is no doubt but these spots are caused by the sweating of the lead from a very cheap quality of zinc, or the lead which is added is sweated out.

Lead is one of the few metals that aluminum will not alloy with, and it does alloy so readily with nearly every other metal ordinarily used, such as copper, spelter, etc., that when lead is present the action of aluminum causes it to separate from the alloy entirely and appear on the surface.

There is no chemical treatment known which will affect the lead and will not affect the spelter, and therefore, the lead cannot be removed. Even if it could be removed, it would probably leave the surface pitted and rough at the lead spots.

The covering of these spots can readily be done with any opaque lacquer. Some lacquers are applied and allowed to dry in the air, and some are applied and then baked on. Those that are baked on are superior. —Aluminum World.



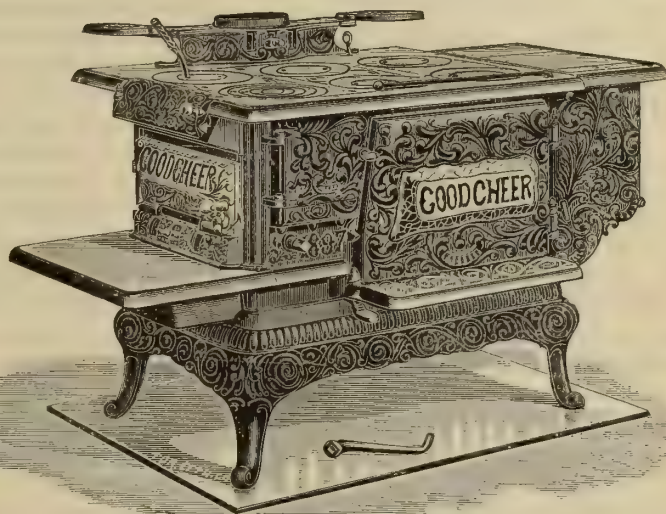
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Threestyles each
— Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

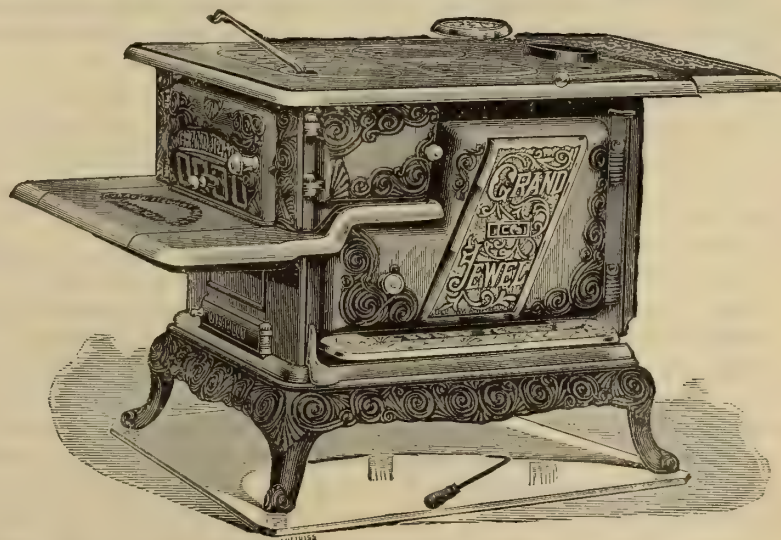
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With
Patent
One-piece
Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son,
MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A MEETING of the creditors of Laing & Meharry, hardware merchants, Port Perry, Ont., has been called for the 17th inst. The firm has assigned to Henry Barber, Toronto.

Denis Gauthier, general merchant, Roberval, Que., has obtained an extension.

A. Paie, general merchant, South Roxton, Que., has assigned to Lamarche & Benoit.

Joseph Lapierre, general merchant, St. Antoine, Que., has assigned to Lamarche & Benoit.

W. Kauffman, dealer in stoves and tinware, Drumbo, Ont., has assigned to John J. Foot.

A consent of assignment of E. W. Matthews & Co., bicycle dealers, Montreal, has been filed.

Jas. Naismith has been appointed liquidator of the Guelph Norway Iron and Steel Co., Limited.

Charles Lundy, general merchant, Newmarket, Ont., has assigned to A. E. Widdifield, Newmarket.

A meeting of the creditors of Alexander & Lefebvre, bicycle dealers, Montreal, was held on the 9th inst.

J. Fraser Richardson, lumber merchant, Lower Brighton, N.B., is offering to compromise at 10c on the dollar.

H. F. McQuire & Co., general merchants, Webbwood, Ont., is offering unsecured creditors 25c. on the dollar cash.

An order has been granted to wind up the affairs of The John Eaton Co., Limited. E. R. C. Clarkson has been appointed interim liquidator.

Charles M. Deverell, general merchant, Ravenshoe, Ont., has assigned to A. E. Widdifield, Newmarket. A meeting of creditors was held on the 5th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

The Kootenay Wire Works Co., Trail, B.C., has dissolved.

Masse & Masse, machinists, Granby, Que., have dissolved.

Robert & Robert, hardware merchants, St. Henri de Montreal, have dissolved.

Cantin & Bresse, tanners, Quebec, have dissolved. M. Cantin continues alone.

Robertson & Steneral, tinsmiths, Trail, B.C., have dissolved. J. H. Robertson continues.

R. & S. Rankin, general merchants, Falding, Ont., have dissolved. S. A. Rankin continues.

George Delisle and Felix Delisle have formed a partnership in Montreal to do business in hides under the style of Delisle & Fils.

The firm of Heath, Strachan & Co., general merchants, Huntsville, Ont., has been dissolved. Albert Heath has retired.

Harry L. Heath and W. B. Strachan have formed a new partnership and will continue the business under the style of Heath & Strachan.

Love & Tryon, general merchants and lumber dealers, Grenfell, N.W.T., have admitted T. T. W. Bready in the grain business.

William J. B. McDonald and Peter Largie have formed a partnership in Granby, Que., to trade as tinsmiths under the style of McDonald & Largie.

John A. and John E. Macdonald have formed a co-partnership in Westville, N.S., to run a general store under the style of Macdonald & Macdonald.

Archibald Dunsmore and Thomas Dunsmore have formed a new partnership in Oxford, N.S., to do a hardware business under the style Dunsmore & Co.

John Hoolahan and Wilfrid Vesina have formed a partnership in Montreal to do business as stove manufacturers under the style Hoolahan & Vesina.

SALES MADE AND PENDING.

Cook & Dunlop, carriage makers, Vancouver, are advertising to sell out.

The general stock of Therien & Co., St. Remi, Que., has been sold at 55c. on the dollar.

The general stock of H. Blanchette, Valracine, Que., has been sold at 43½c. on the dollar.

The stock in connection with the estate of C. H. Gerbig, Ayr and Woodstock, Ont., has been sold.

The general stock of Jos. Comsoltez, St. Michel (Belle Chasse Co.), Que., has been sold at 51½c. on the dollar.

The stock of the estate of F. Bowman & Co., dealers in sporting goods, Ingersoll, Ont., has been advertised for sale by auction on 13th inst.

CHANGES.

A. B. Trites is opening out a general store at McLeod, N.W.T.

Hector Fournier, Amqui, Que., is opening out a general store.

Arthur P. Couture has commenced a roofing business in Montreal.

J. B. Charette, general merchant, Amqui, Que., is giving up business.

Fred Magee is commencing a general business in Port Elgin, N.B.

Duquette & Co. are opening out a general store at Whitewood, N.W.T.

D. J. Cantelou, general merchant, Leslie, N.W.T., has removed to Saltoun.

A. Blayney, coal and wood merchant, Vancouver, has gone out of business.

Marks, Thomas & Co., general merchants, Port Arthur, Ont., have sold out their liquor business to M. Downing & Co.

Exilda Dagenais, wife of Hercule Fauteux, has been registered proprietress of

DOMINION FLINT PAPER CO.

Hamilton, Ont.

Supplying the Canadian demand with Improved Paper to sand paper the whole Dominion.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Steel Roof, West Block, Ottawa," will be received until Tuesday, 24th inst., for the construction of a steel roof over a portion of the West Block Departmental Building, Ottawa.

Plans and specification can be seen and form of tender and all necessary information obtained at this Department.

Persons are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honourable the Minister of Public Works, equal to five per cent. of amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

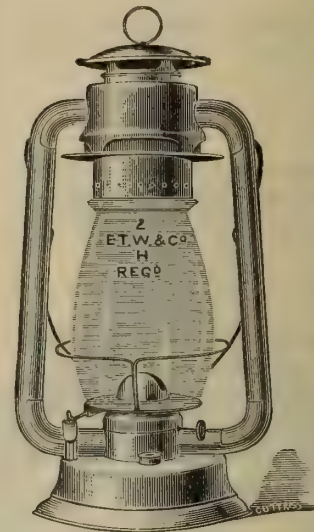
E. F. E. ROY,
Secretary.

Department of Public Works, }
Ottawa, Aug. 6, 1897.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (34)

E. T. WRIGHT & CO.Manufacturers
of...Tubular and
Cold Blast
LanternsBird Cages
Mouse Traps
Flour SiftersStamped
Re-tinned
and Japanned

..TINWARE



HAMILTON - CANADA.

If you handle : : :

Wolff-American
High Art - Cycles.

.. AND ..

YALE CYCLES

You can suit all tastes
and all prices.

Representatives—

Dorken Bros. & Co.

MONTREAL.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

the business of H. Fauteux, sash and door manufacturer, Ste. Cunegonde, Que.

R. & S. Graham & Kerr are opening out a general store at Neepawa, Man.

James Wilson is commencing a business in lumber in Kingston, Ont.

The general stock of Riddell & Davidson, Langley Prairie, B.C., has been sold to Coulter, Berry & Co.

FIRES.

The mill of H. & F. D. Swim, general merchants, Doaktown, N.B., has been burned. Estimated loss, \$15,000.

The tannery and storehouse of E. Frank Mosley & Co., bicycle merchants, Montreal, have been destroyed by fire. They were partially insured.

DEATHS.

O. G. Voceller, Quebec, is dead.

INDIAN INK.

M R. FRASER, British Consul at Wucu, on the Yang-tsze, in his last trade report, gives an interesting account of the manufacture of the so-called Indian ink, which is made only in the Anhui province. It is more correctly called China ink (encre de Chine), and from Anhui it goes to every part of China and all over the world. In 1895 about two tons of it, valued at £564, were exported from Shanghai to foreign countries. The materials with which this beautiful black ink is made are sesamum or colza oil, or the oil expressed from the poisonous seeds of a tree extensively cultivated in the Yang-tsze valley, and also well known in Japan. To this varnish and pork fat are added. The lampblack made by the combustion of these substances is classed according to the materials and the grade of fineness, and also according to the time taken over the process of combustion. The paste made of this lampblack has some glue added, and is beaten on wooden anvils with steel hammers. Two good hammerers can prepare in a day eighty pieces, each weighing half a pound. A certain quantity of the musk of the musk-deer, or of Baroos camphor, for scenting, and gold leaves, varying from twenty to one hundred and sixty to the pound, are added to give a metallic lustre. The materials thus prepared are molded in molds of carved wood, dried, which takes about twenty days in fine weather, and adorned with Chinese characters in gilding. About thirty or thirty-two average sized sticks go to the pound. The price varies from 2s. or less per pound to as much as £7, there being over a dozen different grades. Nearly all writing is done by the natives throughout China, Japan, Korea, Tongking and Anam with this China ink, rubbed down on a stone ink-slab, and applied with a paint brush of sable, fox or rabbit hair, set in a bamboo holder, and when not in use carefully covered with a protecting brass cap. The superior kinds of this ink appear to be used in China and not exported.



VanTuyt & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL - - - TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works

Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL



CURRENT MARKET QUOTATIONS

TORONTO, Aug. 13, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16
Straits. 0 16

Tin Plates.

Charcoal Plates—Bright.

	Per box.
L.S., equal to Bradley.	\$5 00
I.C., usual sizes	6 25
I.X., "	7 50
J. R. & Co.—	
I.C.	5 00
I.X.	6 25
I.X.X.	7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X. 4 25
I.X.X. 5 00
I.X.X.X. 5 75
D.C., 12½x17 3 00
D.X. 3 75
D.X.X. 5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base... 3 15
20x28. 6 25

Charcoal Plates—Terne.

Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 8 00
I.X., Orion 8 00

Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs }
" 14x60, " } 0 05% 0 06
" 14x65, " }
Tinned Sheets.
72x30 up to 24 gauge. 0 06 0 06
" 26 " 0 06% 0 07%
" 28 " 0 07% 0 07%

Iron and Steel.

	Base Price
Common Bar, per 100 lbs	1 55
Refined "	1 80
Horse Shoe "	1 80
Band "	2 00
Hoop "	2 00
Swedish "	4 00 4 25
Sleigh Shoe Steel "	2 50
Tire Steel "	2 50
Machinery "	2 75 3 00
Cast Steel, per lb	0 10 0 14
Russian Sheet, per lb	0 10% 0 11
Tank Plates, 1-5 and thicker.	2 00 2 25
Boiler Rivets	4 50 5 00

Boiler Tubes.

1½-inch	0 06% 0 07%
2 "	0 07% 0 08%
2½ "	0 09% 0 11
3 "	0 11

Steel Boiler Plate.

¼ inch	2 45
½ inch	2 35

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier.....	2 50	2 70
18 to 20 gauge.....	2 25	2 50
22 to 24 ".....	2 25	2 35
26 ".....	2 35	2 45
28 ".....	2 45	2 55

Canada Plates.

All dull, 52 sheets.....	2 40
Half polished.....	2 45
All bright.....	2 85

Iron Pipe.

Wrought, ¼ to ¾ inch, 1½c; ½ inch, 2½c;
¾ inch, 2½c; 1 inch, 3.55c; 1½ inch,
4½c; 1½ inch, 6c; 2 inch, 2½c.
Galvanized, 60 per cent.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots.	Per lb.
16 gauge.....	0 03% 0 03%
18 to 20 gauge.....	0 03% 0 03%
24 gauge.....	0 03% 0 03%
26 ".....	0 04 0 04
28 ".....	0 04 0 04

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼ " " "	4 75	4 75
" 5-16 " " "	4 00	4 00
" 7-16 " " "	3 75	3 75
" 9-16 " " "	3 25	3 25
" 1 " " "	2 85	2 85
" 1½ " " "	2 75	2 75
Trace, per doz. pairs.....	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per doz. yards.....	0 13	0 50
Jack chain, double, per doz. yards.....	0 15	0 50
Jack chain, brass, single, per doz. yards.....	0 20	1 00

Copper.

Ingot.
English B. S., ton lots 0 11% 0 12
Lake Superior.....
Bolt or Bar.
Cut lengths, round, ½ to ¾ in. round and square
1 to 2 inches..... 0 18 0 19
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes.....	0 15	0 16%
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.		
Planished and tinned, 14x48 and 14x60	0 25	0 27
Braziers. (In sheets.)		
4x6 ft. 25 to 30 lbs. ea., per lb.	0 17	0 19
" 35 to 45 " 0 15% 0 16%		
" 50 lb. and above, " 0 15 0 16		

Boiler and T. K. Pitts.

Plain Tinned, per lb	0 21
Spun, per lb.....	0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12½ p. c. off list.
From 20 gauge up, 12½ p. c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c. off list.	
nests, hard-rolled, 2x4 ft....	0 20 0 00

Zinc Spelter.

Foreign, per lb	0 04% 0 04%
Domestic ".....	0 03% 0 04

Zinc Sheet.

5 cwt. casks.....	0 05% 0 05%
Part casks.....	0 05% 0 05%

Lead.

Imported Pig, per lb	0 03% 0 03%
Domestic, per lb.....	0 02% 0 02%
Bar, 1 lb.....	0 04% 0 04%
Sheets, 2½ lbs. sq. ft., by roll.	0 04% 0 04%
Sheets, 3 to 6 lbs., per sq. ft., by roll.....	0 04 0 04%
NOTE.—Cut sheets ½ cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount.	
NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.	

Solder.

	Per lb.	Pe
Bar half-and-half.....	0 11 0 11%	
Standard.....	0 10% 0 11	
Wire.....	0 17 0 19	

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09 0 09%
Other makes, per lb.....	0 08 0 08%

Anti-Friction Metal.

	Per lb.
'Beaver' brand.....	\$0 20

White Lead.

	Per cwt
Pure, Assoc. guarantee, ground in oil, 25 lb. irons.....	5 15
No. 1 do.....	4 77%
No. 2 do.....	4 40
No. 3 do.....	4 02
No. 4 do.....	3 65
Brandram's B. B. Genuine.....	6 25
" Decorative.....	5 95
" No. 1.....	5 35
" No. 2.....	4 65
f.o.b. Halifax, St. John, Montreal, Toronto	6 50
James' genuine.....	6 00
No.....	6 00

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)
Pure, per gallon..... 1 00
Second qualities, per gallon..... 0 90
Barn (in bbls.)..... 0 70 0 90
Sherwin-Williams..... 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 07
Chrome Yellow 0 11
Golden Ochre..... 0 06
French 0 05
Marine Black 0 09
Green..... 0 09
Chrome 0 08
French Imperial Green..... 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe cwt.....	1 35	1 40
Yellow Ochre (J.F.L.S.), bbls. per cwt.....	2 75	
Yellow Ochre (Royal), per cwt.....	1 10 1 15	
Venetian Red (best), per cwt	1 80 1 90	
English Oxides, per cwt.....	3 00 3 25	
American Oxides, per cwt.....	1 75 1 90	
Canadian Oxides, per cwt.....	1 75 1 90	
Burnt Sienna, pure, per lb.....	0 10 0 10	
do. amber.....	0 09 0 09	
Drop Black, pure.....	0 09 0 09	
Chrome Yellows, pure.....	0 18 0 18	
Chrome Greens, pure, per lb.	0 12 0 12	
Golden Ochre.....	0 03% 0 03%	
Ultra marine Blue in 28-lb. boxes, per lb.....	0 08	

Fire Proof Mineral, per 100 lb.	1 00
Genuine Eng. Litharge, per lb	0 07
Mortar Color, per 100 lb.....	1 25
James' Gen. Red Lead, 190 lb	0 04%
Pure In dan Red, No. 45, lb.	0 08
Whiting, per 100 lb.....	0 50

Paris Green

Casks.....	0 13%
50-100 lb. kegs.....	0 14
25-lb. irons.....	0 14%
-lb. Boxes.....	0 15

Sulphate of Copper.

Casks, for spraying, per lb.....	0 04%
100-lb. cases, do. per lb.....	0 05

Patty.

Bladder in bbls., per 100.....	1 75
Bulk.....	1 65
100-lb. cases (tins) per 100.....	2 00

Varnishes.

	(In bbls.)
No. 1 Furniture, per gal.....	0 65
Extra.....	0 90
Brown Japan.....	0 65
Brown Japan, Turpentine, p.g	0 85
No. 1 Carriage, per gal.....	1 30
And ex. No. 1 Carriage.....	1 60
Gold Size Japan, per gal.....	1 00
Pure Orange Shellac.....	1 35
Hard Oil Finish.....	1 10
Oil Shellac.....	1 20
White Shellac.....	2 25

Linseed Oil.

Raw, per gal. net.....	0 41
Boiled, per gal. net.....	0 44
Outside points 2c. more than above figures.	

Turpentine.

1 to 4 barrels, net.....	0 41
Outside points 2c. more.	

Castor Oil.

In cases, per lb.....	0 08%
Small lots.....	0 09

Cod Oil.

Cod Oil, per gal.....	0 50 0 55
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Glue.

	(In bbls.)
Common.....	0 07% 0 08
French Medal.....	0 10 0 10%
Cabinet, sheet.....	0 11 0 12
White, extra.....	0 16 0 18
Gelatine.....	0 22 0 30
Strip.....	0 16 0 18
Coopers.....	0 19 0 20
Al clear.....	0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.	

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent. Amer.
Central Fire Cartridges, pistol sizes, Dom. 30 per cent.
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.
Shot.
Canadian, common, 17½ per cent.
Brass Shot Shells, 55 and 10 per cent.
Primers, Dom., 30 per cent.

Wads.—Baldwin			Blind Rollers.			Cradles, Grain.			HAMMERS.		
Best thick white felt wadding, in ½-lb bags, 1 00	per lb		Annex, per doz	1 25	1 75	Canadian	dis. 25 per cent.		Nail		
Best thick brown or grey felt wads, in ½ lb. bags, 0 70			Mascott, " "	1 35	1 85				Maydole's, dis. 5 to 10 per cent.	Can., dis 25 to 27½ per cent.	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99		Erminie, " "	1 12	1 20						
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35		Blind and Bed Staples.			Dies.			Tack.		
Best thick white card wads, in boxes of 500 each, 8 gauge	0 55		sizes, per lb	0 7½	0 12	Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			Magnetic, per doz.	1 10	1 20
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20		Bolts.			Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			Sledge.		
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25		Carriage, dis., 70 p. c. off new list						Canadian, per lb	0 07½	0 08½
Thin card wads, in boxes of 1,000 each 8 gauge			Tire, dis., 70 and 5 per cent.			Door Springs.			Ball Pean.		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M		Stove dis., 70 per cent.			Torrey's Rod, per doz. (15 p.c.)	2 00		English and Can., per lb.	0 22	0 25
11 and smaller gauge	0 60		Elevator, dis., 35 to 40 per cent			Coil, per doz	0 88	1 60			
9 and 10 gauges	0 70		Machine, dis., 70 p.c.			English per doz.	2 00	4 00	HANDLES.		
7 and 8 gauges	0 90		Coach Screws, dis. 80 p.c.			Draw Knives.			Axe, per doz., net,	50	2 00
5 and 6 gauges	1 10		Boring Machines.			American, dis. 70 and 10 per cent.			Store door, per doz	1 00	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—			Complete, with augers, each.	5 00	7 50	Canadian, dis. 25, 50 and 10 per cent.			Chest, per doz. pairs.	0 40	2 50
11 and smaller gauge	1 15		Braces.						Chisel.		
9 and 10 gauges	1 40		Barber's	6 00	7 75	Drills.			Firmer, per gross	3 00	4 50
7 and 8 gauges	1 65		Barber's Ratchet	10 00	11 00	Hand and Breast.			Socket Firmer, per gross	3 25	8 00
5 and 6 gauges	1 90		Farmers	2 00	2 75	Millar Falls, per doz.	16 00	51 50	Socket Framing, per gross	3 75	5 00
			llar's Falls	15 50	29 00	P. S. & W., dis. 40 per cent.			Fork.		
Anvils.			Brackets.						C. & B., dis. 45 per cent. rev. list.		
Per lb.	0 10	0 12½	Shelf.			DRILL BIT.			C. & B., dis. 45 per cent. rev. list.		
Anvil and Vice combined, each.	4 50		Japanned Canadian, per doz.			Morse, dis. 37½ to 40 per cent.			Saw.		
Wilkinson & Co.'s Anvils, lb.	0 09	0 09½	pairs	0 50	3 40	Standard, dis. 50 to 60 and 5 per cent.			American, per doz.	1 00	1 25
Wilkinson & Co.'s Vices, lb.	0 09½	0 10	Berlin Bronze Canadian	0 85	3 20				Plane.		
Augers.			Broilers.			ELBOWS.			American, per gross.	3 15	3 75
Gilmour's, discount 65 p.c. off revised list.			Light, dis. 65 to 67½ per cent.			Stovepipe.			Hammer and Hatchet.		
Hollow Stearn's, per dozen	13 00	20 00	Reversible, dis. 65 to 67½ per cent.			Per doz	75	1 70	Canadian, 45 per cent.		
Adjustable Stearn's, each	5 50	6 50	Vegetable, per doz., dis. 37½ per cent.			FAWCETS.			Cross-Cut Saw.		
Post-hole, Vaughan's, each	1 35	1 60	Henis, No. 8, "	6 00		Cork Lined, per doz.	0 30	0 35	Canadian, per pair	0 15	0 0
Excelsior, Jennings', discount 50 per cent.			Henis, No. 9, "	7 00		Wine, per doz.	1 30	3 25	HANGERS.		
Awls.			Queen City "	7 50	10 00	Star,	2 80	3 90	Door, 4 and 5 inch, per pair.	0 40	
Sewing, per gross	0 65	1 59	Butchers' Cleavers.			Fenn's Corkstops, No. 2, per dozen.		1 70	Lanes, 50 to 50 and 5 per cent.		
Pegging, "	0 65	1 25	From 8 to	ch, per doz.	4 23	Petroleum, per doz.	4 50	6 50	HATCHETS.		
Brad, "	0 85	1 60	Butts.			FILES AND RASPS.			Canadian, dis. 40 to 42½ per cent		
" handled, per gross	3 60	30	Brass.			Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			HINGES.		
Saddlers, per gross	0 45	1 60	Wrought Brass, dis., 17½ p.c. revised list.			Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			Blind, Parker's, dis. 60 and 10 to 65 per cent.		
Awl Hafts.			Loose Pin, dis. 70 per cent.			Black Diamond, 50 and 10 per cent. to 50 10, 5.			" Shepherd's Noiseless, dis. 60 per cent.		
Patent Peg, oss	7 25	8 00	Wrought Steel.			Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.			Light T and strap, 70 and 10 p.c.		
" Sewing, per gross.			Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.			Heavy, per lb	0 03¾	0 04¾
Awl and Tool Sets.			Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			Heller's Horse Rasps, 50 per cent.			Screw hook and hinge		
Millar's Falls, per doz.	2 80	3 30	Berlin Bronzed, dis. 70, 70 and 5 per cent.			Jowitt's, English list, 25 to 27½ per cent.			6 to 12 in., per 100 lbs.	3 15	
AXES.			Gen. Bronzed, per pair	0 40	0 65	American, 60 to 60 and 5 per cent.			14 in. up, per 100 lbs.	2 35	
Splitting Axes	5 25	5 50	Can Openers.			Great Western, 60 and 10 per cent.			Per doz. set.		
Chopping Axes—			Acme, per gross.	9 00	10 00	FLUTING MACHINES.			Screw, Eureka.	1 13	1 80
Black Prince	7 25	7 50	Sardine Scissors, per doz	3 75	4 50	Each	0 60	2 00	Gate, Clark's	1 50	2 20
Forest Clipper	7 25	7 50	Card.			FORKS.			" Shepherd's, dis. 50 to 60 per cent.		
Lance	8 50	9 00	Horse, per do	0 60	1 00	Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.			Spring	1 00	3 50
Mann's	8 00	8 25	Carpet Stretchers.			FREEZERS			Shepard's Samson.		1 20
Maple Leaf	9 50	10 00	American, per doz	1 00	50	Ice Cream.			HOES.		
Ham Made	7 50	7 75	Bullards, per doz	6 50		Gem, from \$1.25 to \$7 net.			Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 lis		
Climax	8 00	8 25	Carpet Sweepers.			FRUIT PRESSES.			Planter, per doz	4 00	4 50
Phantom	8 25	8 50	Bissell, per doz	22 50		Henis', per doz.	3 25	3 50	HOOKS.		
Axle Grease.			World, "	21 75		Enterprise, dis. 10 per cent.			Cast Iron.		
Per gross	6 00	13 00	Daisy, "	24 00		Shepard's Queen City, dis. 15 per cent.			Bird Cage, per doz	0 50	1 10
Bath Tubs.			Star	18 00		FRY PANS.			Clothes Line, per doz	0 27	0 63
Zinc, discount.	3 90	4 0	Crown Jewel, per doz.	29 00		Acme, dis. 65 to 67½ per cent.			Harness, per doz	0 72	0 88
Copper, discount, 40 and 10 p.c. off revised list			Grand Rapids, "	33 00		GAUGES.			Hat and Coat, per gross.	1 00	3 00
Steel clad, 20 per cent. discount.			Cartridges.			Marking, Mortise, Etc.			Chandelier, per doz	0 50	1 00
Boxing extra			(See Ammunition.)			Stanley's, dis. 50 to 55 per cent.			Wrought Iron.		
Bells.			Castors.			Winn's, Nos. 25 to 33, each.	1 65	2 40	Wrought Hooks and Staples, Can., dis. 47½ per cent.		
Hand.			Bed new list, dis. 55 to 57½ per cent.			GLASS.			Wire.		
Brass, 60 per cent.			Plate, dis. 52½ to 57½ per cent.			Window.			Hat and coat, dis. 60 to 60 and 10 p.c.		
Nickel, 55 per cent.			Cattle Leaders.			Box Price.			Belt, per 1,000	0 60	2 70
Door.			Nos. 31 and 32, per gross.	8 50	9 50	DOUBLE DIAMOND.			crew, bright, Eng., dis. 60 per cent.		
Gon	5 50	8	Cement.			Star.			HORSE NAILS.		
" Peterboro', discount 50 per cent.			Canadian, Portland.	2 50		Per 50 ft.			Canadian, dis. 50 p.c.		
Cow.			English	2 75		Per 100 ft.			Canada Horse Nail Co.'s "C" brand f.o.b. Montreal,		50 p.c.
American make, discount 66½ per cent.			Belgium	2 50		Per 100 ft.			ICE PICKS.		
Canadian, discount 45 and 50 per cent.			Canadian hydraulic	1 10		Under 25	1 30	2 50	Star per doz	3 00	3 25
Farm.			Figures are for carload lots.			26 to 40	1 40	2 70	KETTLES.		
American, each	1 25	3 00	Chalk.			41 to 50	3 00	4 00	Brass spun, 7½ p.c. dis. off new list.		
House.			Carpenters' Colored, per gross	0 45	0 75	51 to 60	3 30	5 00	Copper, per lb.	0 30	35
American, per lb	0 35	0 40	White lump, per cwt	0 60	0 65	61 to 70	3 60	5 50	American, 60 and 10 to 65 and 5 p.c.		
Bellows.			Red	0 05	0 06	71 to 80	4 00	6 25	KEYS.		
Hand, per doz.	3 35	4 75	Crayon, per gross	0 14	0 18	81 to 85	4 50	7 25	Lock, Can., dis. 50 p.c.		
Moulders', per doz	7 50	10 00	Chisels.			86 to 90		8 25	Cabinet, trunk, and padlock,		
Blacksmiths', discount 60 per cent.			Socket, Framing and Firmer.			91 to 95		9 25	Am. per gross	1 60	
Belting.			American, dis. 75 to 77½ per cent.			96 to 100		10 75	KNOBES.		
Extra, 40 and 10 per cent.			Canadian, dis. 50 and 10 per cent.			101 to 105		12 25	Door, japanned and N.P., pe		
No. 1, leather, discount 60 per cent.			Tanged firmer, per doz	0 85	4 00	106 to 110		14 25	doz.	0 65	3 00
Standard, 55 per cent.			Churns.			GLUE POTS.			Bronze, Berlin, per doz.	2 75	3 25
Agricultural, 65 and 5 p.c.			Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.			Tinned, each	0 30		Bronze Gem,	6 00	9 00
Bench Stops.			Steel, net.	3 00		Enamelled each	0 55		Sava,	8 75	10 00
Per doz	5 00	6 00	Clamps.			GRINDSTONE FIXTURES.			Shutter, porcelain, F. & L.		
Bits.			Judds, dis. 20 per cent.			P. S. & W., per doz.	3 30	4 00	" screw, per gross.	1 30	4 00
Auger.			Stearns, per doz	3 00	10 00						
Gilmour's, discount 65 and 5 per cent.			Clips.			CLIPPING MACHINES.					
Excelsior, discount 60 per cent.			Axle dis. 65 per cent.			CLIPPING MACHINES.					
Rockford Common, 35 to 65 and 5 per cent.			Coffee Mills.			CLIPPING MACHINES.					
" Perfection, 35 and 10 per cent.			Box	3 60	13 00	CLIPPING MACHINES.					
Jennings' Gen., net list to 5 p. c. discount.			Side	3 60	4 00	CLIPPING MACHINES.					
Car.			Enterprise, No. 0	1 35		CLIPPING MACHINES.					
Gilmour's, 47½ to 50 per cent.			" No. 2	70		CLIPPING MACHINES.					
Expansive.			Compasses, Dividers, Etc.			CLIPPING MACHINES.					
Clark's, per cent.			American, dis. 62½ to 65 pe cent			CLIPPING MACHINES.					
Excelsior, 10 per cent.						CLIPPING MACHINES.					
Gimlet.						CLIPPING MACHINES.					
Clark's, per doz	0 65	0 90				CLIPPING MACHINES.					
Diamond, Shell, per doz	1 00	1 50				CLIPPING MACHINES.					
Nail and Spike per gross	2 25	5 20				CLIPPING MACHINES.					

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00
doz. sets net. to 10 per cent.
Christie, \$7.00 net.
Hay knives, spear point, L or T handle, 60
to 60 and 10 per cent.
Lightning, per doz. 6 50 8 40
Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
Galvanized, " 1 87 3 85
King, wood, " 2 75 2 90
" glass, " 4 00 4 50
A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
Russell & Erwin, per doz. 1 75 7 50
Cabinet,
Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00
Scandinavian, " 1 00 2 40
Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.
Flat head, discount 25 p.c.
Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
No Name Metal, " 18
Mystic Metal, " 08
F. O. B. New York or Chicago.

MALETS.

Tinmith's, per doz. 1 25 1 50
Carpenters', hickory, per doz. 1 25 3 75
Lignum Vitae, per doz. 3 85 5 00
Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
Gorman, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85
f.o.b., Toronto, Montreal, Hamilton,
London.

Cut Nails (Steel). Add 10c. to the prices in
list for iron nails.

Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04
delivered Toronto, Hamilton, London,
and to places where freight from Pitts-
burg is in less than carload lots does not
exceed 21c.; other places where rate is
higher, excess is added. Terms, 4 months
or 3 off and 30 days; delivered in lots of
10 kegs or more.

Brads and finishing nails, special sizes, 80
p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon,
per gross. 3 38 4 00

Diamond " 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½

Carbon safety " 0 18 0 00

Canada w. w. " 0 18 0 00

American w. w. " 0 00 0 21

Pratt's Astial. 0 00 0 22

OILERS.

McClary's galvan. iron oil can,
with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAISLS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis,

Mrs. R. Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range 1½ to 4 " 100 00

No. 56 Hand Machine, range 2½ to 6 " 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent.,
American dis. 55.

Wood, fancy Canadian or American, 37½
to 40 per cent.

Bailey's (Stan. R. & L. Co.) 50 per cent.

Miscellaneous, dis. 25 to 27½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½
40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors', " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 0 17½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis
60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc.,
(Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc.,
(Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclu-
sive, 65 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier,
65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.

" in ½ lb. boxes and
cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 5½ 00 7½

¾ in. " 5½ 00 7½

½ and 5-16 in. " 6½ 00 8½

Cotton " 15 17

Russia Deep Sea " 00 13

Jute " 6¾ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

" N.P., per set. 0 62½ 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

B. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10 " "

SAWS.

Crosscut, McMillan & Haynes,
per dozen. 0 40 0 70

" Empire, McMillan & Haynes,
per ft. 0 00 0 70

Hand, Disston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Disston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

" Lincoln, McMillan &
Haynes, per doz. 0 00 7 50

Whiting. 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Rox, per doz. 2 10 4 50

Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ &
10 p.c.

Wood, F. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis.
77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 80 p.c.

" N.P., dis. 70 p.c.

Clauss, full nickel, 60 p.c.

japanned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

" " " 1 25 1 35

Tin rim, per doz. 2 30 2 45

" black. 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme " 3 00 5 00

Lock, Andrews'. 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English. 1 8 5 00

Iron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross. 7 50 12 00

Dessert, " 21 00 00 00

Table, " 30 00 30 00

Dessert Forks, " 24 00 00 00

Medium " 27 00 00 00

Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90

Steel, dis. 70 per cent., revised list.

Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized. 00 2½ 00 2½

Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb. 0 28 0 60

Hindostan, " 0 06 0 07

" slaps, per lb. 0 09 0 09

Labrador " 0 00 0 13

" Axe, " 0 00 0 15

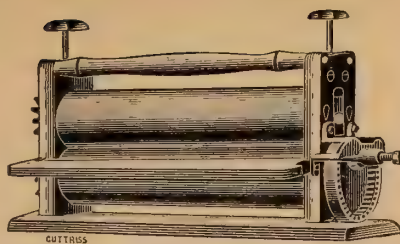
Turkey " 0 00 0 50

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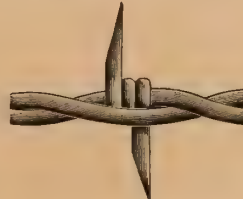
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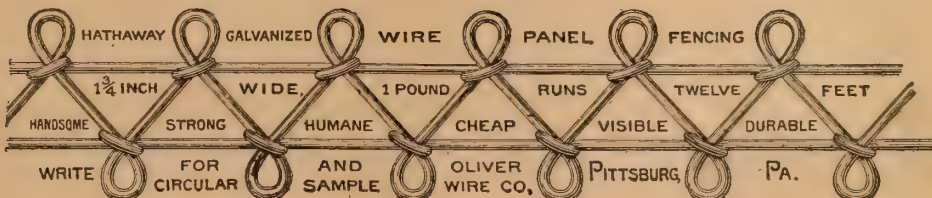
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ABOUT ENAMELS !!!

We have met with unqualified success in the manufacture of Enamels, as the largely increased demand for them testifies.

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VOL. IX

MONTREAL AND TORONTO, AUGUST 21, 1897

No. 34



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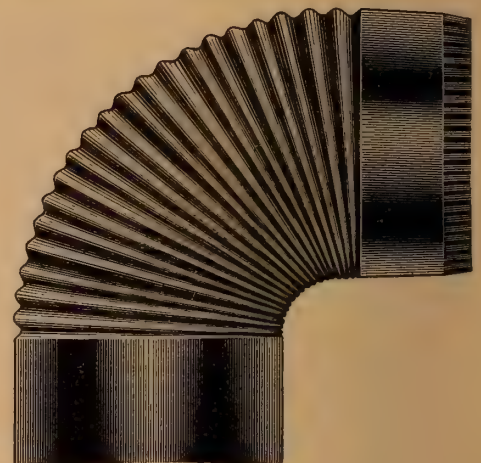
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THE FRENCH TREATY AND THE MINIMUM TARIFF.

THE regulations which have been sent out by the Dominion Government, instructing the collectors at the various Customs ports to allow the products of France the same privileges under the minimum tariff as the products of Germany and Belgium, have set at rest a question which has been debated to a more or less extent since the recent decision of the law officers of the Crown was given out.

Briefly, the question was as to whether the French Republic was so entitled, and it is not surprising there should have been a difference of opinion thereon.

France, first of all, is not a favored treaty nation. The privileges which certain products of that country have enjoyed in Canada since 1894 are accorded by special treaty negotiated on our behalf by Sir Charles Tupper and Lord Dufferin, who were appointed plenipotentiaries by Her Majesty for the purpose; the Dominion, of course, not having the power to make treaties.

But while France is not a favored treaty nation, there is an article in the treaty between that country and Canada which reads:

Any commercial advantage granted by Canada to any third power, especially in tariff matters, shall be enjoyed fully by France, Algeria and the French colonies.

The French treaty, it will be remembered, specified certain articles which were to be admitted into Canada at a reduced rate, ranging all the way from 30 to 50 per cent. And some people were in doubt as to whether the extract from the treaty above given was intended merely to govern the specified articles or applied to French products of any kind whatsoever.

If the clause applied only to the articles specified in the tariff, it seemed clear that the ruling of the law officers would not disturb the existing condition of affairs, for even after the discriminating duty of 25 per cent. in favor of British products came into force, the articles named in the treaty would still have an advantage of from 5 to 25 per cent. over those from any and all countries.

But if the article in question did not apply to the general imports of France before the decision of the law officers, why should it afterwards?

The article in question declares, as we have already shown, that any commercial advantage granted to any third power shall be enjoyed fully by France.

It is obvious that under the reciprocal tariff a "commercial advantage" was given a third power. But the Dominion Government time and again declared that France, like Belgium and Germany, was not entitled to share in the advantages accorded Great Britain.

Attached to the French treaty was a schedule known as Schedule B. It was really the Canadian tariff on the specified articles named in the treaty at the time that instrument was ratified, and it was at the rate of duty therein set forth that these

articles were to be assessed no matter if Parliament were to subsequently increase the general tariff on them to any extent whatsoever. And this principle has been faithfully observed under the new tariff, which does levy a higher rate on one or more of the articles enumerated in the French treaty. But thus far and no farther would the Government go.

That in now going farther the Government has done the righteous thing no one will probably gainsay. At any rate, it is obvious there is no country more entitled to the minimum tariff than the French Republic. The treaty with France is of our own making, although negotiated through Great Britain. The German and Belgian treaties, on the other hand, were made and their conditions imposed upon us without our even being consulted.

Our total dutiable imports from France in 1896 were \$2,487,133, on which duty to the amount of \$1,020,804 was collected. Included within these amounts were goods to the value of \$284,414 which came in under the provisions of the treaty, and the duty collected on this amount was \$82,235.

On the basis of last year's figures, minus the duty collected on the goods specified in the treaty, Canada's loss of revenue upon French imports from April 1897 to August 1, 1898, when the treaties with Germany expire, will probably be in the neighborhood of \$175,000, all but one month of the sixteen included in these dates being under the one-eighth reduction.

Taking Germany, Belgium, France, and all the nations interested, the loss of revenue will probably not much exceed five or six hundred thousand dollars.

THE SITUATION IN LINSEED OIL.

THE Toronto situation in linseed oil is a decidedly peculiar one, but is, nevertheless, easily explained, and ought not to be embarrassing to either the retail or wholesale purchaser.

At present oil is selling in Toronto at 41c. English oil in car lots cannot be laid down in Toronto at less than 42c., and American oil costs 43c. at present quotations. The consequence is that both American and English oils are shut out of the market.

However, this cannot be for long. Dealers say the present low price is owing to the necessity of the Baden crushing firm to clear out their stock, and that when this is done prices will immediately rise. Now, however, large stocks are being held by the dealers, and it is questionable whether the rise will come soon or not. It is certain that when the stocks now held are sold out advances will take place, but it is doubtful if there will be a rise before that time, as competition is keen in spite of the uniform price now maintained.

Not only does this Canadian crushed oil sell lower in Toronto than can the English and American be bought by the wholesalers, but the price in Toronto is lower than is that in Montreal.

Advices from Montreal, as will be seen, state that higher prices are certain to be in existence there soon, so that likely any attempt made to raise the price in Toronto will be successful. Indeed, an advance may occur the first part of next week.

It would, at any rate, be advisable for retailers to lay in a stock, as the wholesalers have done, for time will only improve the quality of the oil. It is certain to go no lower, as foreign quotations are firm.

WHY THE LAW WAS PASSED.

Ever since the law was passed compelling incorporated companies to spell out the word limited, affixed to their style, those who are opposed to such regulations and see no advantage in the enforcement of such laws have been wondering what motive prompted the law-makers to such an action.

Some seemed to infer that it was for the benefit of people who would be mean enough to inform, and sundry other reasons have been advanced. It has remained for a wholesale paint and oil merchant to have sifted the matter thoroughly and to have

discovered the real cause of the trouble. Strange to say, however, he places the blame upon members of his own trade, and we have to regard his reasoning as a joke.

In explaining the matter to **HARDWARE AND METAL**, "the chief result of the enactment," he jokingly remarked, "was to make business men not only change their signs but even purchase new ones altogether. To do this the painters required a large amount of gold leaf, smalts, and such goods, for nearly all signs are in gilt letters now. Here," he said, "can be easily seen where the idea originated. Some of our paint houses must have had an overstock of this line of goods, and have taken this means of increasing the demand and of getting rid of their stock. Our trade has certainly increased wonderfully."

Although the condition of affairs is rather strange, we can hardly charge the Government with such crookedness. The dealer, however, deserves credit for his quickly observing powers, his clever reasoning, and particularly for his self-sacrifice in confessing the wrongs which the members of his trade commit.

SCARCITY OF CASTOR OIL.

Dealers in Toronto report that the market is absolutely bare of castor oil. This is all the more unfortunate considering that the price has advanced 1½c. per lb. during the last few days.

Buyers here have not been buying freely for some time in the expectancy of a falling market. The reverse has come, however, with the market absolutely bare.

Now, still higher prices are generally looked for, but the home market is very much excited, and dealers are yet rather uncertain.

LINSEED OIL HIGHER.

The strong advices from abroad in regard to linseed have had an unsettled influence on prices in Montreal. Sellers are compelled to ask higher prices, but have not as yet agreed upon a uniform basis. However, as far as can be learned, a fair average advance is 2c., and we quote that as the rise in our regular market report, though sales have been made for less money during the week. Cables from abroad state that the price has advanced the equivalent of 3c. per gallon,

COLOR: ITS SOURCES.

LAST week we had an enquiry as to any book on colors that might be obtainable. As there is no book of the kind published in Canada, and as only meagre information is obtainable from circulars of paint houses of the United States, we give the following as an exchange's information on the subject in the hope that it will be of value to our readers:

The source of color is always an interesting subject, but not half enough is understood of the subject by many dealers, and so perhaps a few points on the subject may not be amiss. The cochineal insects furnish the gorgeous carmine, crimson, scarlet and carmine lakes. The cuttlefish gives sepia, which is the inky-fluid which the fish discharges when attacked. The Indian yellow comes from the camel; ivory-chips produce the ivory-black and bone-black. The exquisite Prussian blue comes from fusing horses' hoofs and other refuse animal-matter with impure potassium-carbonate; various lakes are derived from roots, barks and gums; blue-black comes from the charcoal of the vine-stock. Turkey red is made from the madder-plant, which grows in Hindustan. The yellow sap of a Siam tree produces gamboge; raw sienna is the natural earth from the neighborhood of Sienna, Italy; raw umber is an earth found near Umbria. Indian ink is made from burnt camphor; mastic is made from the gum of the mastic tree, which grows in the Grecian Archipelago. Bistre is the soot of wood ashes; very little ultramarine—obtained from the precious lapis lazuli—is found in the market. Chinese white is zinc; scarlet is iodide of mercury; and vermilion is from the quicksilver ore, cinnibar.

In mixing colors for tints the following table will be found useful:

Mixing—	Makes—
Red and black.	Brown
Lake and white.....	Rose
White and brown	Chestnut
White, blue and lake	Purple
Blue and lead color.....	Pearl
White and carmine.....	Pink
Indigo and lampblack.	Silver grey
White and lampblack.....	Lead color
Black and venetian red	Chocolate
White and green	Bright green
Purple and white	French white
Light green and black	Dark green
White and green	Pea green
White and emerald green..	Brilliant green
Red and yellow	Orange
White and yellow.....	Straw color
White, blue and black	Pearl grey
White, lake and vermilion	Flesh color
Umber, white and venetian red...	Drab
White, yellow and venetian red...	Cream
Blue, black and red	Olive
Yellow, white and a little venetian red.....	Buff

Red and violet do not at all accord well. Orange and yellow accord much better than

red and orange ; orange and green do not accord well ; orange and violet are passable. Yellow and green form an agreeable combination ; greenish-yellow and violet blend nicely ; the arrangement of yellow and blue is more agreeable than that of yellow and green, but it is less lively. Green and blue produces an indifferent effect, but better when the colors are deep ; green and violet, especially when light, form a combination preferable to green and blue. Orange-yellow when placed by the side of indigo increases its intensity. Red and green also intensify each other. Yellow and indigo combine perfectly. Red and orange do not go well together ; red and yellow are pretty well, especially if the red is purple-red rather than scarlet, and the yellow rather greenish than orange. Red and blue are fairly good, especially if the red inclines rather to scarlet than crimson. Blue and violet together are bad, for the two colors disagree—it is always advantageous to separate them by white. Black never produces a bad effect when it is associated with two luminous colors. Black and white sensibly modify bright colors, while grey never ex-

actly produces a bad effect in its associations with two luminous colors, yet in most cases its assortments are dull. Blue when placed by the side of orange increases the intensity of the latter, and vice-versa.

GAS-FITTINGS.

It has been urged in several of the exchanges that merchants who have a supply of gas-fittings on hand should make haste and dispose of them. The incandescent system of lighting, they claim, is not standing still in regard to improvement, and, although the electric light is now dearer than gas, a greater revolution will surely be effected. When this revolution takes place, and electric lighting is rendered cheaper than lighting by gas, the cities where gas is now universally used will immediately discard its use and have the system of electricity inaugurated in their buildings. No warning will be given of the coming change. Such innovations take place unexpectedly and suddenly.

There is a good deal of sound argument in this reasoning and it should be particularly impressive to Toronto hardware merchants, owing to the proximity of the

Niagara Falls, which are now being tried to be utilized to give cheap electricity. The schemes are no idle dreams.

However, the change does not appear to be near enough to warrant an entire sacrifice of the gas-fitting business, but some provision ought to be made for the probability. Why not dispose of stocks of the old and heavy types of gas-chandeliers even if it has to be done at a small margin ? There are always a number of buyers ready to seize upon anything like bargains, and who will say that the loss on the transactions may not be the means of bringing in a good share of business for other lines which bear the usual profits ?

It is a good time to consider the effects of science on the ordinary business while the members of the British Association for the Advancement of Science are in our midst.

BAR IRON AND STEEL EXTRAS.

HARDWARE AND METAL in its issue of July 10 published a new list of extras on bar iron and steel. Some misconception has arisen in regard to these extras, which it is our duty to correct. The list published on the date mentioned applies to all steel, including sleigh shoe and tire, but does not cover spring steel, Reel machinery steel, or Toe Coak steel. These lines are exempted from the list in question.



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Honest Goods
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Fitchburg, Mass., U.S.A.



A SUCCESSFUL BUSINESS MAN.

MANY of the most successful business men in the United States have received their early commercial training in Canada. Thomas Martindale, of the firm of Thomas Martindale & Co., Philadelphia, is one of them, and the following reference to him in *The Trade Magazine* will probably interest some of his old friends in Canada and prove beneficial to those who are young either in experience or years.

Mr. Martindale is by birth an Englishman, his eyes having first opened to the light in Ling Riggs, Weardale, County Durham, England. This was on Dec. 15, 1842. While he was yet a little lad his parents removed to this country, spending first a year in Canandaigua, N. Y., and then, in 1854, removing to London, Canada. His father, although by no means rich in this world's goods, was, to use the words of his more fortunate son, "as industrious, as plucky and nerry a man as ever lived; really and truly in his sphere and in his way, a hero." His mother was a fitting wife for such a man. There were twelve children in the family, of whom Thomas was the eldest, and we may well believe that the severest economy and the most unflagging industry on the part of everyone capable of work were required to make both ends meet, when the father's wages were but a dollar and a quarter a day.

Shoes and clothing for the entire family were made at home. Vegetables raised on the little garden spot surrounding the house went far towards supplying the table. A cow and a few chickens added not only to the home bill of fare, but brought in a little income in money. The mother and daughters were able to realize something from their needles. And so, by dint of the most careful saving and continual labor, the family not only lived in comfort, but thrived as well, and most of the boys and girls grew to mature years with such a fund of good common sense and vigorous health as no other childhood could have insured them.

It was a most valuable training for the subject of this sketch. He learned the necessity for economy, the importance of hard work, the value of a dollar, the healthfulness of a plain diet and the joy of a good digestion with that thoroughness that prepared him for the distinguished life that lay before him. And realizing almost from infancy the responsibility of doing what he could for the support of the family developed that sturdy independence in thought and action which is one of his most marked characteristics.

It must not be supposed that he was in any wise particularly unlike the average

boy of his day. He was just as full of fun and just as much given to sport as he is at present, even now admitting the delight with which he used to watch a certain gamecock belonging to the family thrash the neighbors' roosters, while the gardening committed to his care by the elder Martindale was adjourned until the battle was over, or the father happened to observe the neglect of the work. He could never have posed as the goody-goody boy of the Sunday school books, a fact which may explain his subsequent success.

At thirteen years of age he sought and found employment as boy in a dry goods store. His initial salary was a dollar and a half a week. It did not remain at that figure very long, for he was both capable and ambitious, as well as industrious, and by the time he was twenty years of age he not only had superintending charge of the largest mercantile establishment of the kind in Canada, but was president of the Dry Goods Salesmen's Association of Toronto. Certainly this was a magnificent record to make in seven years.

How did he do it? He had no influential friends, no superior educational advantages, no social prestige. He was only one of twelve rosy youngsters who used to romp in the humble London cottage. But there he had learned common sense, tireless industry and those principles of sterling morality which, after all, are the true secrets of all enduring success. And these lessons, drilled into him through the wholesome poverty of his childhood, did more for him when once he faced life for himself than would a multitude of those advantages which young men often prize so highly.

In 1869 he abandoned the dry goods business finally. He was at that time employed in Boston, Mass., whither he had gone from Canada. His reasons were obvious. To use his own words, "I had been thirteen years in the dry goods business and was heartsick of its worriments and trials, and anxious to get out of it. My spirit rebelled against standing behind the counter space of three feet, and from morning until night answering questions for a never-ending procession of female shoppers, the greater number of whom asked for 'samples' and then passed on. And as the policy of the firm I was clerking for would not permit salesmen to attempt to influence sales by argument, the position was devoid of excitement and wearying to the utmost."

It was about this time that the velocipede craze was sweeping the country. This vehicle, it will be remembered, while crude and clumsy, beside the modern bicycle, was phenomenally popular, and men who had enough means to hire a hall and buy a few velocipedes to hire to those who desired

to ride literally coined money. When, therefore, a friend proposed to Mr. Martindale that they go out west and start a "rink," he eagerly accepted the proposition and abandoned the dry goods business. Each had saved a little money. The friend remained in Boston to purchase the wheels, and Mr. Martindale started west to secure a hall in some suitable locality. Going to Pittsburg, he had no difficulty in securing the proper building in an eligible location. This done, he settled down to wait for the velocipedes. They never came. The courage of the friend weakened. He concluded not to invest, and so informed Mr. Martindale, who, after paying his expenses and the rent of the hall, found himself a good deal poorer than he had been, and, what was worse, entirely out of employment.

In this dilemma, he concluded to return to Canada. Fortunately, a friend gave him a pass to Oil City, wishing to help him that far on his way, and the journey to Canada was not completed. Those were the palmy days in that city, and Mr. Martindale, captivated by the bustle and stir which everywhere met his view, decided to remain a while and try his fortune. Seeking the most successful oil operator there, Mr. John S. Rich, he applied for work.

"What can you do?" asked Mr. Rich.

"I can do anything that any other man can do."

"Well, can you dress tools, bits and reamers?"

"No, sir."

"Can you drill?"

"No, sir."

"Can you run an engine?"

"No, sir; but I can learn to do any of these things."

"My good man, I am not hiring learners," was Mr. Rich's reply; but recognising the pluck of this new applicant for employment, he directed him to a boarding house on Charley Run, some two miles distant, promising to come up himself in a day or so and see what he could do.

He was as good as his word. He gave Mr. Martindale a pick, shovel, mattock and axe, and ordered him to cut out a road in the side of the mountain, between two wells of the Union Oil Co. Here was a little more "excitement" and lack of "monotony" than the young clerk had bargained for when he left Boston. A good many dry goods clerks under similar circumstances would have taken the first train out of Oil City. But Thomas Martindale accepted the work and the implements, and in two weeks' time had completed the road. Instead of retiring to rest after his hard day's work was done, he studied the stationary engine with

the assistance of a kindly foreman, and learned it so thoroughly that by the time his road was completed he was installed as engineer at one of the wells on a salary of three dollars a day.

He, himself, has told this portion of his experience: "I boarded myself, carried my groceries and other necessities from Oil City two miles over the mountain, did my own cooking, built a music stand with a gas jet in front of it, practised my scales, sang, laughed and gamboled across the mountains (when off 'tower') like a ten-year-old boy. I was happy, and as that is the ultima thule of all mortals, I was to be envied."

It is to be noted, however, that this happiness was not of a nature which enabled him to settle down content with three dollars a day for life. It was not long before he had accumulated a little money, which he invested in a half interest in a dingy little grocery store at Oil City. At last he was in his proper sphere of business. After buying out his partner, he proceeded to bring the store up to his ideals in such a transformation as made the eyes of the customers open with wonder. The whole establishment was brightened up. The quality of the stock was greatly improved; fair prices were affixed; a delivery system was introduced; it was only a few months until the "checkered store," so called from the fact that its front was painted in red, white and blue, was too small. The "blue store" was then rented, and by methods already adopted, supplemented by liberal and judicious advertising, it, too, was speedily outgrown. He was therefore compelled to move into a commodious brick building at the river bridge, and found himself in the "Mammoth," the leading grocery in the thriving city.

His career was one of uninterrupted prosperity; but having a fine opportunity to sell out and being desirous of doing business in a large city, he disposed of his stock, and in 1875 removed to Philadelphia, where, at the corner of Tenth and Market streets, he opened the first "California" store.

From that time to the present Thomas Martindale has been among the leaders in the retail grocery trade of the great city. This is a high compliment to pay him, but it is safe to say that he has always been among the leaders in every great interest touching the politics or the charities of Philadelphia.

This latter statement leads to a consideration of a side of his career which has not been noticed thus far. He was born with a good voice and a taste for music, both of which he found time to cultivate, in spite of the arduous labors incident to his busy life. He possesses, too, a high grade of ability as a public speaker. These gifts naturally

SELL PAINT THIS FALL

You can do it, if you go about it right—lots of it.

There's always a lot of paint used in the Fall. There is going to be more than usual used **this** Fall. Trade is improving—good times are here. The first thing many people will want to do is paint up.

Your business is to make the most of the opportunity. The first thing is to procure a good paint—the next, to push it.

We've got the paint—and the push too. **S.-W.P.**, The Sherwin-Williams Paint and The Sherwin-Williams Push.

We're going to sell a lot of paint this Fall. Do you want to handle it? There is not much time to lose—we're after it now. Let us hear from you at once through our salesmen or the mail.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

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brought him into public notice, more or less, very early in his history. Naturally broad in his views, and always interested in the great movements whose end is the uplifting of public morals or the amelioration of evil conditions in municipal government, it is not strange that he has been forced into prominence as a citizen. And certainly it reflects lasting credit upon his character that, unlike so many able business men, he has been ever willing to devote his time and talents to the public weal.

On March 23, 1891, he was the speaker at a public meeting in the Council chamber, which resulted in the organization of the Trades League of Philadelphia, and henceforth as chairman of its principal committees, he was one of the most potent leaders in accomplishing the important measures by which that organization has done so much to advance the material interests of the city. In platform addresses, in terse and vigorous newspaper articles, in strong representations before committees of the Legislature at Harrisburg or the National Congress at Washington, by all means known to an acute, resourceful, able business man, he worked for Philadelphia, and with such success, too, that it is altogether likely that if his business cares could have

been laid aside to that extent, he would have been Mayor long before now.

He has been no less prominent in charitable movements, for he has a big heart as well as a level head. Of what he has done in a private way nothing need be said, for no one would deprecate public mention of such deeds more severely than he himself. It is only just, however, to state that he has been most active and liberal in those great charitable enterprises that have touched the heart of the nation. For instance, in 1881 he was chairman of the Merchandise Committee of the Irish relief movement. When news of the terrible disaster at Johnstown, Pa., was flashed over the wires he was the first man in Philadelphia to deliver a wagon-load of goods for shipment to the stricken city. He was the first man, too, to propose action for the relief of the famine sufferers in Russia, organizing the movement in Philadelphia, and leading it to most gratifying success. These are but isolated instances indicating the course which he has pursued throughout his entire career, and in conjunction with his public life seem to demonstrate that he holds his ability and his fortune in trust for the benefit of society.

Mr. Martindale insists upon taking time for recreation, and, in addition to music, of

which he is passionately fond, spends much of the time in hunting. He is a fine shot and keen sportsman. He has bagged nearly every kind of game in which this country abounds, and truth compels the statement that while he is reticent as to his business success and modest about his public work, he can't help talking pretty largely about a successful hunting trip. Indeed, most of the literature from his pen, which, it is to be hoped, will some day be collected in book form, is descriptive of his various hunting excursions.

If one should ask for the secrets of the success which has been described in this little sketch, the answer is not difficult.

(1) There is native ability of a high order, developed by an early life whose privations and necessities called for its utmost exercise.

(2) There is energy, persistent industry, and ambition.

(3) There is the rigid honesty that pays cash and expects cash payment in the transaction of business.

(4) There is a good heart and a thorough relish for the brightness that there is in life.

(5) There is that broad patriotism and recognition of human brotherhood which gladly sacrifices self in the interests of others.

These qualities, exercised with the homely common sense of the man, have made Thomas Martindale what he is, and assure him of the bright future that his hosts of friends so earnestly desire in his behalf.

A PLEA FOR GENUINE PAINTS.

A REMARKABLE number of new paints are introduced every year, and many with fancy names, but few of them possess properties which recommend them in preference to the standard productions of established reputation. Yet, singularly enough, because they have new names and because their merits are untried, they command higher prices. Unfortunately, on account of competition and the low prices offered, paints are very much adulterated. The only person who benefits by adulterated paints is the mixer in the first instance, and it must eventually mean to him that his connection can never be what we term thoroughly reliable. The advantages that he gains from using adulterants are that the latter increase its weight, and that it does not consume the same quantity of oil. Take, for instance, pure ochre v. heavy spar. A paint made from pure ochre would require a much larger amount of drying oil than one adulterated with heavy spar; thus in this case he would save money in both ways—viz., less oil and a heavier adulterant. An oil paint consists of a pigment and a drying oil, usually boiled or raw linseed

oil. But we are now surrounded by linseed oil substitutes—resin, resinous oils, mineral oils and metallic resin soap.

The name Legion might be given to the pigments which have from time to time been proposed and used, and there is scarcely a color but what has been used and mixed with oil, and any number of substances have been patented in both England and America for the purpose of replacing white lead, zinc white, zinc sulphide, etc., yet the majority of substitutes patented to replace them are not of great importance, and have met with little favor.

Experiments determine that the most durable paints are those containing a large amount of pigment per unit of surface, and that pigment is best which is strong enough of itself or with a proper proportion of inert material to allow sufficient liquid to be added to it to flow and work well with the brush when applied. With the using of paints there are a great many causes of destruction to be battled with, and hence our plea for those of standard quality to be used. The principal causes of destruction are as follows: (1) Mechanical injury; (2) the action of pernicious gases; (3) chemical action between the pigment and the vehicle or liquid; (4) chemical action between the body covered and the paint, either the pigment or the liquid; (5) the action of light; (6) peeling; (7) destruction by cleaning; (8) water. It is the general opinion of both master painters and manufacturers that the destruction caused by cleaning and the action of water are the worst of the above causes.

Rapid strides have of late years been made in the manufacture of oxide of iron paints, but factors should only buy from firms who are able to guarantee the percentage of oxide of iron therein contained. There are paints of this type to be obtained where the pigment from which it is made is guaranteed to contain over 90 per cent. of ferric oxide. Where such a percentage of ferric oxide is guaranteed the paint can always be relied upon, as it possesses good covering power and is durable; and, further, such genuine paint is capable of withstanding great heat and other adverse conditions.

But it is not intended here to deal exclusively with any one class of paint—on the contrary, the object is to induce factors and all others interested not to be persuaded into buying cheap paints, for, let it be well marked that where prices are low genuine paints cannot be obtained, satisfaction from adulterated paints cannot be ensured, durability cannot be expected, nor will they stand light and heat, and the various atmospheric gases will soon tell their tale upon cheap, adulterated paints. — The Metal Worker.

MACHINERY AND MECHANICAL DEPARTMENT.

THE WINTON MOTOR CARRIAGE.

FOR a long time it was impossible to purchase a motor carriage at any price; but happily that day has passed. There is, for instance, the horseless carriage made by the Winton Motor Carriage Co., of Cleveland, Ohio. On September 1, 1896, Winton, the president and master mechanic of the company, completed his first motor carriage. It has been in constant use since that time in all kinds of weather and over all kinds of roads. On Decoration Day he ran the carriage over a mile on a circular track in 1.48, thus breaking all records. On June 12 the carriage was given a road test of 60 miles from Cleveland to Elyria and return, and proved its perfect utility for every purpose to which the horse and wagon could be put. The day was warm and the roads were undergoing repairs, so that for a distance of six miles the carriage had to travel through a bed of sand. The trip was made without a hitch, carrying four passengers, and consuming six gallons of gasoline. Five miles of the route were covered in 16 minutes, and the running time for the 60 miles was five hours.

The Winton motor carriage resembles an ordinary trap with seats back to back. The carriage is wide enough to seat six persons comfortably. The motor and driving mechanism are bestowed in the body of the vehicle and are self-lubricating. The ten horse-power motor is of the hydrocarbon type, is almost noiseless, odorless, and free from vibration. The fuel is gasoline, seven gallons being carried on the carriage. A patent feeder converts it into a fixed gas before entering the cylinder without the aid of a carburetor. It is very economical and costs less than a cent per mile over ordinary roads and through the streets.

Among the special features of the motor are the igniter and pneumatic governor, which places the machine under perfect control. By pressing a button the speed can be increased and held anywhere between zero and the maximum power of the motor. The carriage is operated by a lever which at will engages, releases or reverses, or applies the brake. The steering gear is simple and easily handled. The rear wheels are 36 inches in diameter. They are provided with nickel spokes and 3-inch pneumatic tires. Ball bearings are used throughout, thus securing the greatest possible freedom from friction and wear. The body is supported by easy riding springs. It is handsomely finished in natural polished wood. The trimmings are nickel and the cushions and dashboards are leather. The motor carriage is much handsomer than vehicles of this kind are apt to be. The weight of the entire machine is 1,800 pounds.

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NEW MATERIAL IN MATCHES.

IT is predicted by The Pittsburg Dispatch that paper is the coming material for matches. The prospect of the wooden match industry being appreciably affected by a new process for manufacturing matches of paper is held to be extremely probable, particularly as the best wood for this purpose is constantly growing scarcer and more costly. The new matches are considerably cheaper than the wooden product and weigh much less, which counts for much in exportation. The sticks of the matches consist of paper rolled together on the bias. The paper is rather strong and porous, and when immersed in a solution of wax, stearine and similar substances sticks well together and burns with a bright, smokeless and odorless flame.

Strips $\frac{1}{2}$ inch in width are first drawn through the combustible mass and then turned by machinery into long, thin tubes, pieces of the ordinary length of wood or wax matches being cut off automatically by the machine. When the sticks are cut to size they are dipped into phosphorus, also by machinery, and the dried head easily ignites by friction on any surface. There is some talk of utilizing the new invention in the manufacture of matches on an extensive scale for export to India. The invention involves no waste whatever, and the paper

is delivered in rolls like the telegraph tape and converted at one operation into match sticks, and by a second into matches that would dry without storing for a large part of the year in India. One thing, however, must be made sure of—that a wax is used which will harden at a shade temperature of 140 deg. Fahr. at least.

SHEARING VALUE OF WIRE NAILS.

The shearing value of wire nails was recently reported on at a meeting of the Engineers' Society of St. Paul by Messrs. Walker and Cross, students at the State University, where tests were made. They displayed samples and gave some general results of about 200 tests of the various sizes of nails, in white and Norway pine. A white pine joint, held by one 6d. nail, begins to yield at about 70 lbs. of shear and gives way at about 100 lbs. Held by a 6od. nail the corresponding figures are 370 and 820, the maximum figures in all cases being about twice that which indicates the point of yielding. Roughly, the strength of the joint is the cube of the diameter of the nail into 50,000. The largest nails can be driven $1\frac{1}{8}$ in. centre to centre and nearly the full value of the nail is effective. For instance, the result for one 5od. nail to the joint was 347 and 800 while the average of nine 5od. nails was 294 and 790. These

experiments will be extended and the results tabulated and digested, and at a future meeting of the society will be discussed.

IRON ORE SEPARATOR.

An Easton, Pa., despatch says: "For several weeks 400 men and 20 teams have been at work at Westportal, a Jersey hamlet twenty miles below Easton, on the line of the Lehigh Valley Railroad, but it was not publicly known until yesterday for whom the work was being done. It is learned that the Edison Concentrating Company, at the head of which is the famous electrical wizard, are erecting an immense stone building 100 by 500 feet in dimensions and five storeys high, in which iron ore will be separated from the rock and dirt by Edison's process. The building will be completed in a few months. The company has purchased 1,000 acres of mountain land near Westportal, in which are deposits of iron ore. Shafts were sunk there years ago and worked for a time, but they were abandoned and are now full of water. These shafts will be worked again and new ones sunk. Men are now building roads from all parts of the mountain to the building site and yesterday four miles had been completed. When the works are in operation several hundred men will get employment and it is expected that Westportal will be a big town in the next year or two."



Steel Enamelled Ware

ESTABLISHED 1860.
INCORPORATED 1895.

"Crescent," "Royal," and White.

GUARANTEED not to Chip or Burn.

The THOS. DAVIDSON MFG. CO. Limited

MONTREAL

CHEMICAL LABORATORY MCGILL UNIVERSITY

Faculty of Medicine

MONTREAL, October 14, 1895.

THE THOS. DAVIDSON MFG. CO. Limited, MONTREAL.

DEAR SIRS,—I have examined the two samples of Crescent Steel Enamelled Ware, submitted Sept. 24th. I find the Enamel is not acted upon by organic acids nor by dilute alkalis, either when exposed for days at low temperature or even when heated for several hours in contact with these substances. The enamel itself is of such a nature chemically, that it cannot give up anything at all injurious to food materials cooked in contact with it.

I remain, sincerely yours,
(Signed) R. F. RUTTAN.
Prof. Prac. Chemistry.

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

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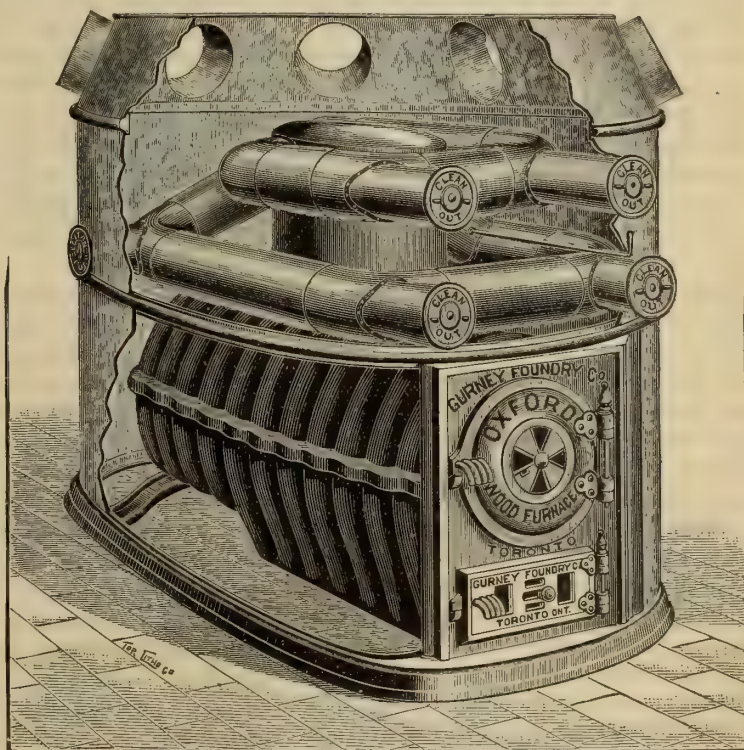
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The Gurney Foundry Co.
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THE HARDWARE DEALER IN HER MAJESTY'S REIGN.

THE air has been full of Jubilee, and loyal as we all are proud to be, most of us are tired of the refrain. Still, we have a great deal to be thankful for that our lot has been cast in the Victorian era. It has been, and will continue, a marvelous advancing and transforming period, unprecedented so far in the annals of history. Retrospect, those who are old enough to do so, and compare 1837 with the present year of grace. Stage coaches instead of railway train, bicycle and motor car—the telegraph, phonograph, telephone, electricity, and multitudes of other things (which have now ceased to be objects of wonder to us) absolutely unknown at that period. Even the postal arrangements partook of the general order of things. Slow and sure—certainly slow; not always sure!

VICTORIAN TRADE CHANGES.

But it is not my intention to expatiate upon the many wonders of Her Majesty's reign. Others, more competent than I, have already treated on this subject in elaborate detail. My desire is rather to sketch briefly the changes that have come over the modus operandi of the hardware trade: they are manifold, some beneficial and some perhaps not so—at least just at present. Undoubtedly, at the commencement of Her Majesty's reign, the hardware trade was a very flourishing and lucrative calling, and also one which carried with it a greater prestige than most other trades. An ironmonger or hardware merchant, in those days, as now, required a large capital, and this alone brought with it a reputation for soundness and wealth which then, as now, meant adulation and sycophancy from the multitude. Let us take a glance at the hardware merchant of 1837, and then compare him with his confrere of the present day. His shop was small, his window very poorly dressed, and the bulk of his large stock hidden away in his barnlike warehouses. Still, it did not matter—the public knew he had the stock, and when they were in want came to him as a matter of course. Moreover, although he lived on his premises and worked early and late (that is to say he was on the premises) he really had no time to waste on window-dressing. He, his wife, and children scarcely ever left their native town, except for a short walk in the country, or, as a special treat, a coach ride to distant London. Bank holidays, half holidays, and the annual outing to the seaside were unheard of, unsought and uncared-for luxuries. His whole mind and body were concentrated on his work.

THE PEACE OF EARLY DAYS.

Competition!—well, he scarcely knew the word. Contracts!—no such word in

his business dictionary. Stores!—unknown. Elaborate and oft-changed window displays!—never dreamed of. Advertisements!—such wanton waste a sure forerunner of want. Cutting prices!—quite unheard of. Quarterly accounts and self-dictated terms from his customers!—not entertained for a moment. Hurry, bustle and drive!—absolutely incompatible with the dignity of his calling. Did he rush hither and thither in search of business? Not he! It came to him as surely as morning succeeds night. Did he offer 20 per cent. off makers' lists only to find that his client had already been offered 25 per cent. and wanted 30 per cent.? No fear!—he would dismiss such a customer with stiff formality, preferring his room to his company, or custom. As a matter of fact, his client would be the last to ask for such terms. In those days, the aristocracy found delight in patronizing the traders of the nearest town.

CHANGES—AND WHO MADE THEM.

Is it so now? No, alas! But the whole blame (if blame there is) does not lie wholly at any particular door. It is the steady and natural outcome of a series of alterations in the economics of trading. To my mind, however, we have to look to the great exhibition of 1851 as the first cause. This novel means of developing trade was introduced and carried to a successful issue by the late Prince Consort. It must be clearly understood that I do not in any way intend to deny what great benefit to the manufacturing community followed that exhibition; but I do imply, and firmly believe, that it was the very first nail in the coffin of the then prevailing order of business. It was the first meeting of maker and user, though not then, as now, a mart for direct purchase. This latter, natural sequence, was reserved for another 20 years.

In 1853 war with Russia was declared—a long bloody strife, and succeeded unfortunately before long by others of like magnitude. But they meant business for England, and immensely improved the position of all branches of the iron industry. Prices went up, and this, with the still maintained high rate of profit, literally meant coining money.

The zenith, however, was reached in the early seventies. Wars of any dimensions were beginning to be things of the past in Europe, and a network of import and export between this country and the continent spread from London to St. Petersburg, from Glasgow to Constantinople, Egypt and the eastern lands beyond. Keener and keener became competition and rivalry. Meanwhile America was "coming on" apace, and began to largely export to this country; though, at that time, the necessity had not arisen for labeling goods, "Made in Germany." Exhibition

followed exhibition, now in one country and now in another. Added to this came the import of corn and grain from Argentina, Russia and other countries, and the consequent flight of the countryman from tilling the ground and the influx to town and city. The failure of the farmer and partial ruin of the landowner followed as a natural consequence; and the latter seventies were sad years indeed to many. The grocer, draper and oilman—till then mainly separate and distinct forms of business—now began to find the pinch in profits, and looked out for a paying addition to their establishments. Naturally, seeing the prosperity of the hardwareman, and for ever hearing it lauded as the trade to make money in, hardware was the first thing to handle.

HOW ABOUT HARDWAREMEN THEMSELVES?

Now, what did the good-natured and easy-going hardwareman do to counteract this movement? Nothing at all! In the meanwhile ideas of living had altered. We no longer lived on the premises—that was infra dig, and to my mind was also a move in the right direction. One's horizon wants to be a trifle beyond money-getting. Still, it means more expense of course. Moreover, higher education became, not a luxury, but a necessity, and paterfamilias found it out in the bill. The general rush resulting from facilities of transit, and the increased tax on the brain, made it absolutely incumbent on the proprietor to take an annual rest both for himself and his family. This he also found out in the bill. Not that it would have mattered under the old regime; but, you see, profits had decreased and expenses increased, which is a coat of another color!

Trade lists and discounts also began to be distributed broadcast at the various exhibitions, with anything but salutary effects; and an occasional direct sale, like distant thunder, presaged the coming storm.

Still he held back! Clients calling with manufacturers' lists and discounts were politely refused, only to communicate forthwith with the fountain head. The stores, too, sprang up with mushroom rapidity, but rocklike solidity, while the grocer, draper,

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.
HAMILTON

About Horse-Shoe Nails:—

It is a matter of considerable importance to every purchaser or consumer of horse-shoe nails, that the best only shall be procured. It does not make so much difference with other nails, which are driven in wood. But with horse nails, as they are only used to attach a shoe to a horse's foot, which is a sensitive, vital structure, it is most important that the nails used, should be perfect in every respect; of the best material and pattern, and free from "splits" or liability to fracture, etc. One imperfect nail, badly driven, may result in permanent disability or lameness to a horse. It is false economy, and poor buying, to take any risk when you can avoid it.

Our "C" brand horse nails have been manufactured and sold in Canada since 1865,—a period of 32 years. They have been, and are still, the standard horse nails of Canada for quality and pattern, and are without a superior anywhere. We use only the best selected Swedish (Norway) charcoal iron rolled nail rods; the best material known for the purpose. These rods are hot forged by machinery, which gives all the advantage of the old-fashioned hand-hammered process, but with greater uniformity. After being pointed and finished by patented machinery, used only in our works in Canada, they are all further examined singly by hand, and every nail not up to our high standard for "C" brand, is thrown out for scrap or "culls." Every horse-shoe nail we sell under our "C" brand is warranted perfect and ready for immediate use. They will be replaced free of charge if found otherwise to any purchaser. If the dealer from whom you usually purchase cannot, or will not supply you with our nails, write us direct, and we will give your name to nearest dealers who will supply the "C" brand.

CANADA HORSE NAIL COMPANY

MONTREAL

and oilman had meanwhile fully established their extra departments. The grocer was rapidly acquiring the brush and broom department; the draper (now blossomed into a housefurnisher), the better-class furnishing ironmongery; and the oilman the cheaper forms of household requisites.

By 1880 things had come to such a pass that the hardwareman (proper) could no longer maintain his conservative ideas of trade. Then he began, very gingerly, to allow discount; but the day was past. Client after client passed by on the other side to patronise the local housefurnisher or grocer; or, worse still, sent direct to "the Stores," or manufacturer himself. Moreover, even the manufacturers themselves, with whom the ironmonger, or his predecessor, had probably dealt solely for 50 years, came and took his orders, and then deliberately called upon his client's clients. Then, woe to the man who had not a long stocking, a working department and a stout heart.

THOSE WHO LET THE GRASS GROW.

We in the trade don't want to be told that the goods sold by the interloper were and are not up to the quality and durability of those stocked by the legitimate hardwareman; but the public have had to buy their experience, and the process has been a long one. "While the grass groweth the cattle starveth," runs the proverb, and it has been

surely exemplified in the case of those of our trade, who either had not the spirit to rise to the occasion, or, having the will, lacked the wherewith.

HEALTHY SIGNS.

But "the darkest hour" precedes the dawn," and our bad half-hour is rapidly passing. There are decided indications that the public are awaking to the fact that cheapness and durability cannot co-exist. At the same time the hardwareman has bought, and learned by heart, his experience; and has come to the conclusion that half a loaf is better than none. More rapid pay (to wit, monthly and quarterly settlements) has made it possible to stock hardware, and yet sell at small profits. Competition has made decent windows and elaborate displays a necessity, and the quondam hardwareman, turning adverse times to account, has blossomed into the up-to-date storekeeper, electrical, hot and cold water, and sanitary engineer, artesian-well borer, and bicycle agent, etc., etc. Some of the more adventurous are rapidly becoming the house-furnisher also. We still retain the proud position of "missing link" between trade and profession, and, to be successful, is bound to be a highly educated and intellectual person.

ABOUT THE FUTURE.

I have been pessimistic, but am now op-

timistic, regarding the future of our trade as a distinct branch. Education has done much, and the rising generation is endowed with a mind open to logical reasoning. Their parents have found, by experience, that all is not gold that glitters; their offspring, profiting by their elders' experience, now desire quality rather than quantity, and are rapidly returning to the metamorphosized ironmonger.

It is not often that a Sovereign attains a Jubilee, much less a Diamond one; nor is it less remarkable that, in the reign of one monarch, one branch of industry should pass from a prosperous condition of partial somnambulism, through the throes of radical aggression time after time, and finally attain a prosperous (though almost unrecognizable) position again. The Victorian era has produced many wonders, but none more extraordinary and successful than the ironmonger of 1897 as compared with his confrere of 1837. Let us trust that the House of Brunswick may long rule the destinies of this mighty Empire, and that the strength and durability of the genuine and legitimate hardware community may be increased year by year.—A contributor to The Hardware Trade Journal.

A ten-seated machine is being built by the Waltham Mfg. Co., Waltham, Mass., for racing purposes. It is to be called an oriten.

IRON TRADE PROSPECTS.

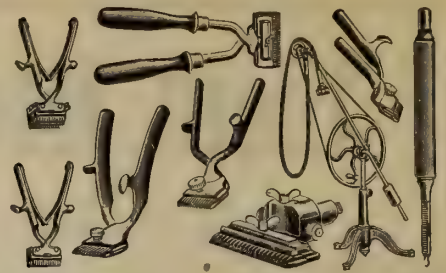
THE conjunction of low prices with improving trade conditions, says The Iron Age, should lead to an enormous increase in the consumption of iron and steel. The times are most propitious for undertaking new enterprises of almost every character. Money is abundant, interest is low, our vast natural resources are again adding to the country's wealth, our workmen are becoming more generally employed, the farmers are again liberal purchasers of all kinds of manufactured products and another era of prosperity opens up before us. According to the latest official estimate, the population of this country exceeds 77,000,000, and the wants of this vast multitude, when they have the ability to purchase what they need or desire, must be far in excess of the results shown from 1894 to 1896, when the closest economy was practised. The population in 1890 was only 62,622,250, and in that year we manufactured and easily marketed 9,202,703 gross tons of pig iron and 6,022,875 tons of all forms of rolled iron and steel, importing 665,771 tons of all sorts of iron and steel products in addition. As 1890 was not a boom year, but might be considered a period of fair prosperity, it would seem reasonable to make a comparison with it. On the basis of the business of that year, therefore, we should be producing pig iron at the rate of about 11,500,000 tons per annum and turning out all forms of rolled iron and steel at the rate of 7,500,000 tons. How much of an increase on recent business this means is indicated by the statistics just published of the output of pig iron in the first six months of this year, which show that 4,403,476 tons were turned out, or at the rate of only 8,800,000 tons per annum. Since 1890, also, conditions have been reversed in our foreign trade, our iron and steel imports being comparatively insignificant, while our exports are climbing to very respectable figures and the outlook for continued growth is exceedingly promising.

Perhaps never before were conditions so inviting for long contemplated improvements to be undertaken. Prices of machinery are below anything that the most economical buyer could have anticipated. Building material of all kinds is selling at almost absurd rates. Experienced contractors are surprised to find how cheaply they can cover their requirements, estimates of cost based on past business being beaten considerably by anxious manufacturers or mechanics. Competition in every line seems at this time to have gone to extremes. It is related of a prominent western heating contractor that, after figuring on the exact cost of labor and materials in a piece of work he

was about to do for himself, he concluded to ask for bids from others in the trade and found that he was able to beat his own cost price considerably—and got the work well done, too. Similar experiences are related in other lines. Such a state of things cannot last long, with the fine prospects ahead of us. Shrewd capitalists are even now taking advantage of their opportunities to make very profitable bargains, and others will speedily follow their example. Low costs are no inducement to investors when the business world is in such a depressed state that everything seems to be going from bad to worse. But when the clouds have lifted, and men are recovering their spirits and renewing their courage, it is to be expected that they will be induced to make fresh ventures, and that very low prices such as now prevail will tempt them to do even more than had been contemplated. In the expansion of general business thus affected the iron trade will necessarily reap a substantial benefit.

DECADENCE OF THE MEDIAEVAL TRADE UNIONS.

The moral havoc wrought by these monopolies was greater even than the industrial havoc. It crushed all feelings of justice and humanity, making its victims more grasping and cruel than Shylock; it led them to the practice of every trick and deception of a Newgate sharper to evade the laws; it stirred up a contention that rivaled the quarrels of the Guelphs and Ghibellines. Apprentices became no better than serfs and slaves. They were not merely pitilessly fined and brutally punished; they were often left in ignorance of the craft that they had purchased the right to learn. In that frightful social and moral revulsion following the long and devastating wars of the sixteenth and seventeenth centuries the corporations became more determined than ever to maintain their industrial aristocracy and monopoly. They refused to admit any trade less ancient and honorable than their own to the rights and privileges of the law; they soiled themselves by contact with no person of illegitimate birth; and in their savage and relentless pursuit of persons engaged in unauthorized traffic they invaded the homes of contraband workmen, confiscating both their tools and the hidden products of their toil, leaving them and their families destitute and starving. To such absurd lengths was the creation of corporations carried for the production of new taxes and new places for court favorites that occupations like the teaching of dancing, the selling of flowers and the catching of birds were organized, and homogeneous occupations like the hat-makers and carpenters, were divided and subdivided beyond the comprehension of the modern mind. — Appletons' Popular Science Monthly.



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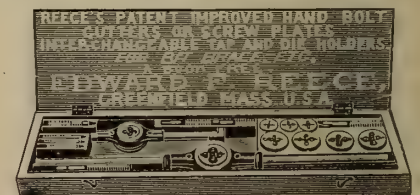
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DERBY SNAP

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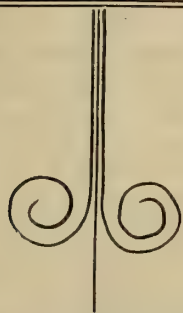


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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

METALS . . .



Tin Plates, Canada Plates
Galvanized Sheets
Black Sheet Iron and Steel

Prices quoted on application either from stock or for import.

M. & L. Samuel, Benjamin & Co.

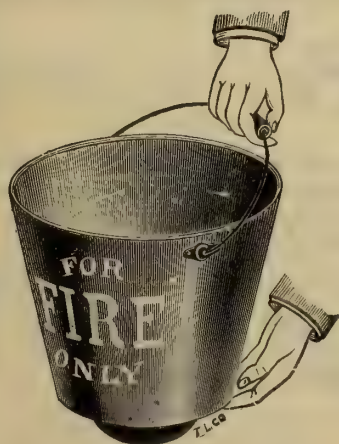
ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

Eddy's Fire Pail



Never mislaid---the careless employee can't use it for ordinary purposes---it won't stand alone---"for fire only"---it's of no use for anything else.

The round bottom does it.

The E. B. EDDY CO. Limited

HULL

MONTREAL

TORONTO

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, August 20, 1897.

HARDWARE.

THE week has shown gratifying signs of activity and the outlook seems certain for a good fall trade. All kinds of shelf goods have received brisk attention this week, both for prompt and forward delivery, and orders from the Northwest and Manitoba especially are of increasing volume. Plain and barbed wire remain quiet, but there has been more enquiry for wire nails during the past ten days. Horsenails have been quite active in a jobbing way, and the enquiry for bolts and rivets is well maintained. Barn door and strap hinges are moving well, also heavy iron pots and kettles. Cutlery has been quite active and demand for mounted sleigh bells is a new feature of the week. Sporting goods of all kinds continue active, especially guns and ammunition.

BARBED WIRE — Business continues quiet. We quote: \$2.20 to \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE — There is nothing doing in plain wire either. Discounts are unchanged at 30 and 5 off, f.o.b. Montreal.

WIRE NAILS — Demand has picked up a trifle on western account, but not to any material extent. We quote as before, \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS — Orders for small lots continue, and if anything, they have been in greater volume this week. Prices continue on the basis of \$1.85, f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS — There has been a good demand for horse nails this week, though orders are confined to small lots. Discounts continue at 50 per cent.

HORSESHOES — Business remains much the same. Orders for the new extra light steel shoe are a feature of the enquiry. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe weight steel shoes, all forward, \$5.50.

SCREWS — A moderate trade is noted. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE — Very little

business to report. Discounts are 12½ per cent.

BOLTS — Enquiry for bolts continues fair. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach screws, 80; blank bolts, 60; sleigh shoe bolts, 80; and plough bolts, 65 per cent. Square nuts, 4¼c. off the list, and hexagon, 5¼c.

RIVETS — Demand for rivets continues good. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE — Trade has been of moderate but steady volume. We quote as follows: Sisal, 7-16 and upwards, 5¾c.; ¾, 6¾c.; 5-16 and ¼, 6¾c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7¾c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS — Business practically nil and discounts unchanged.

CLOTHES WRINGERS — The same remarks apply to clothes wringers.

HARVEST TOOLS — Business small, with no feature of importance to report.

SPADES AND SHOVELS — There is only a quiet trade passing.

FILES — As last reported. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

BUILDING PAPER — Trade quiet at 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

LEATHER BELTING — Remains without feature.

HINGES — Quite a number of orders for barn door and strap hinges have been filled during the week, especially for Manitoba and the Northwest. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WARE — Plain iron ware, such as pots and kettles, is going forward quite freely this week on Northwest account.

CUTLERY — Demand for cutlery has been particularly good for forward delivery this week.

SLEIGH BELLS — Quite a large volume of orders for mounted sleigh bells of all descriptions are noted this week. They are chiefly on Manitoba account.

SPORTING GOODS — Demand for guns and ammunition has been quite brisk during the week. In fact, stocks in jobbers' hands have been materially reduced, especially in guns, but there are some large shipments close at hand.

SHOT — Continues in good enquiry. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

TRACE CHAIN — There have been quite a few orders for wire trace chain during the week.

CEMENT — No striking change is to report in the cement market, business being light, as the unsettled weather has interfered with

ELBOWS . . .



Do not place your orders for elbows thinking we cannot supply as cheaply as others. We are in a position to sell any style of elbow at the same prices as others, and . . .

We Will Guarantee Prices

3 Styles { 1 Piece, Heavy, 5, 6 and 7 inch.
1 " Light, 6 " 7 "
4 Pieces, Heavy, 5, 6 " 7 "

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST

AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman Sporting Goods Co. 403 St. Paul St.

MONTREAL

trade to some extent. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2 per bbl. ex wharf.

FIREBRICKS—Demand continues good for firebricks, and prices are unchanged at \$16 to \$21 per 1,000, as to brand.

METALS.

There have been few changes in heavy iron or metals during the week, but business exhibits an expanding tendency, and a good fall trade seems assured. The only alteration of importance is an advance in the price of pig lead under firmer advices from abroad.

PIG IRON—Only a few small lots of pig iron have been moving, and prices continue steady. We quote as follows: Hamilton, \$15.50 to \$16 for No. 1, and \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carroh, \$18; Ayrshire, No. 1, \$17; Eglington, \$17; and Carnbro', \$16.50.

BAR IRON—Car lots of bar iron have been moved at \$1.30, but we quote \$1.35 to \$1.40 for ordinary lots.

BAND IRON—Quiet and featureless, at \$1.65.

HOOP IRON—The same as the above, at \$2.25.

SHEET STEEL—There has been a fair enquiry for sheet steel and prices rule firm on the basis of \$2.35.

SHEET IRON—Stocks of sheet iron are better assorted than they were. Demand in a jobbing sense is moderately brisk and a good quantity of material is moving out. We quote as before, \$2.25 as the base.

GALVANIZED IRON—Business in galvanized iron has been quite brisk during the past week. We quote: "Queen's Head" and "Morewood," \$4.25 to \$4.30.

TINNED IRON—Quiet and featureless, with prices unchanged at \$5.50 up to 20 gauge.

LEAD PIPE—There is little life to report in this line. We quote 7 to 7½c., with 30 and 5 off.

PIG LEAD—There has been a further sharp advance in pig lead abroad and \$3.50 was the inside price this week for round lots, while for ordinary quantities the range has been advanced to \$3.60 to \$3.75.

INGOT TIN—There is a fair demand for small jobbing lots. We quote 16 to 16½c.

INGOT COPPER—Quiet and unchanged at 12 to 12½c.

SHEATHING COPPER—There is little to report. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—The brisk enquiry for iron pipe continues. We quote: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.80; ¾-inch, \$2.25; ¾-inch, \$2.70; 1-inch, \$3.70;

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS



Rhode Island Pattern Horseshoes.

Korrek Shape. Quality Guaranteed.

AND FACTORIES
MONTREAL

NOVA SCOTIA STEEL CO.

Limited

NEW GLASCOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION HAMMOCK MANUFACTURING CO., Paris, Ont.

1¼-inch, \$4.80; 1½-inch, \$6.35; 2-inch, \$8.55. Galvanized pipe, ¼-inch, \$2.95; ⅜-inch, \$2.95; ½-inch, \$3.80; ¾-inch, \$4.60; 1-inch, \$6.40; 1¼-inch, \$8.80; 1½-inch, \$11.20; 2-inch, \$15.15.

CANADA PLATES — Demand has been fairly active and orders are free for forward as well as for prompt delivery. Stocks in jobbers' hands are better assorted than they were. We quote values steady at \$2.25 to \$2.30.

TIN PLATES — There has been a good movement in these, especially in the sizes for roofing purposes. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

COIL CHAIN—Nothing special to report.

TERNE PLATES—Light supplies still interfere with business in terne plate. Prices rule firm at \$6.25.

BOILER PLATE—There is no change in prices, which range from \$1.90 to \$2.

SOLDER—In fair enquiry at 12c.

SPELTER—Still firmly held at \$4.75.

ANTIMONY—Without feature, at 9½ to 10c.

SHEET ZINC—A quiet jobbing enquiry is noted at 5¼ to 5½c.

SCRAP IRON—The rolling mills are still fairly well supplied and no large contracts are noted. We quote: No. 1, \$12, and No. 2, \$6 to \$7.

PAINTS, OILS, ETC.

There has been considerable falling off in business for the past week, but prices, notwithstanding, show increased firmness. The advance in white lead reported in last issue has not in any way checked the demand, and with continued firmness in raw material the price is as firm as before the advance; indeed, the tendency may be taken as still upward. Linseed oil continues to advance abroad, the rise amounting to about 3c. per gallon. The exact selling price it is difficult to ascertain, as it appears to vary, but we give the nearest figures. Turpentine continues quiet and is marked down 1c.

WHITE LEAD—In good demand. Government standard, \$5.25; No. 1, \$4.87½; No. 2, \$4.50; dry white, \$4.50.

RED LEAD—Scarce and higher. Genuine casks, 4¼c.; kegs, 4½c., and No. 1, 1c. less.

LIQUID PAINTS — Quiet and without change.

PARIS GREEN—Season practically over and prices nominally as last quoted: Drums, 13½c.; packets, 14½c.

LINSEED OIL — Decidedly dearer, the nearest quotation being: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Quiet, single barrels selling at 44c., and 5-barrel lots at 43c.

VARNISHES — Demand light and prices unchanged.

SEAL OIL—Quiet at 42 to 44c.

COD OIL—Unchanged, at 31c.

NAVAL STORES—As last reported. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There has been more enquiry for window glass this week for forward delivery. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Quiet and steady. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

Continue steady and fairly active. We quote as follows: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50.

HIDES.

Hides continue unchanged all round.

TRADE NOTES.

Linseed oil has advanced fully 3c.

Turpentine has declined 1c., and rules easy in tone.

Arrivals of cement this week comprise 2,100 barrels English. No Belgian has arrived.

Pig lead has been advanced 10c. per 100 lbs. owing to firmer advices from abroad.

An increasing demand for guns, ammunition and cutlery is one of the features of the week.

ONTARIO MARKETS.

TORONTO, Aug. 20, 1897.

HARDWARE.

THE trade in general has shown a slight improvement over that of last week. Some nice assorting orders for hardware and tinware have been frequently received. Trade is keeping up well for this season of the year and August receipts promise to be an increase on those of last year, just as the other months of 1897 have excelled the corresponding months of last year in business. A few staple lines of which quite a number of dealers bought somewhat heavily when the first reduction in price took place are now rather quiet, but these are the only quiet lines. Plumbers' and steam-fitters' supplies are moving more freely. Orders for skates and winter supplies are now being booked. Bolts, hinges and rivets are moving very freely.

BARB WIRE—Featureless. There is not much doing. We quote: \$2.20 f. o. b. Toronto, Montreal, London and Hamilton. Terms are: 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—As far as volume of business is concerned, there is nothing new to report; trade is exceptionally quiet. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—A slight improvement in this line is to be noted this week, but there is not much change. Discount, 30 per cent.

WIRE NAILS—The slight improvement noted last week has been well maintained. Prices are a little more satisfactory, but are still somewhat unsettled. When quoting freight, classification must always be consulted. The ruling idea as to base price is \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS — About the same quantity is moving as wire nails. Prices are being firmly adhered to as far as can be learned. We quote as follows: Base price, \$1.85 Toronto, Montreal, Lon-

Binder Twine.

HOBBS HARDWARE CO. — London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH — — — — —
CENTRAL PRISON — — — — —
CONTINENTAL TWINE CO.'S — — — — —
DOMINION GOVERNMENT — — — — —

TWINES

It will pay YOU to send us your Orders for

Corrugated Conductor Pipe

which we make from 26 gauge galvanized steel plate, in 10 feet pieces without a cross joint ELBOWS AND SHOES TO MATCH.

Galvanized Eave Trough

Made in a great variety of designs, and sold at a price that is so low that it will not pay you to make it.

THE QUALITY AND FIT OF OUR TROUGH AND PIPE IS UNEQUALLED.

The METALLIC ROOFING CO. Limited

Write for
Price List No. 100.

MANUFACTURERS, ... *Toronto.*

don and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is still good. Discount, 50 per cent.

HORSESHOES—Trade still remains steady. Prices are unchanged. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—A good demand has characterized the trade this week. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—There is not much doing. Discounts are 12½ per cent.

BOLTS—A brisk trade has been doing this week, which is not expected to continue. Discounts are: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ⅜, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ⅜

and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—No noticeable falling off has been experienced by the dealers this week. While orders are not large they are quite numerous. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Are going out freely. Discounts are 17½ per cent.

ROPE—Trade has quieted somewhat. The demand is principally for plough line purposes. We quote: Sisal, 7-16 in. and larger, 5¾c.; ⅜ in., 5¾c.; ¼ and 5-16 in., 6¾c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ⅜ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Orders are not frequent. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Nothing new has developed during the week. Trade is still

quiet. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—The demand is naturally light now, but at the same time it is utterly impossible to procure any snaths from Canadian manufacturers, and jobbing lots are about exhausted. Discounts are 60 and 10 per cent.

SPADES AND SHOVELS—Business is quiet. Discount, 45 and 2½ per cent.

BUILDING PAPER—The demand is falling off somewhat. Prices are unchanged. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—A slight increased business has been experienced this week. The demand is principally for medium quality. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—Trade, if anything, is a little better in tinned and granite ware than it was last week, but it is not at all brisk.

HINGES—Demand is quite free. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CUTLERY—Trade is improving. Early

fall orders are coming in and the demand is fairly active.

SPORTING GOODS—Trade is quite active. Guns, rifles and ammunition are moving quite freely. Some large orders in the latter have been received.

POULTRY NETTING—There is nothing to note. Discount, 67½ per cent.

GREEN WIRE CLOTH—Trade is only steady. We quote \$1.35 per 100 square feet.

GARDEN HOSE—Still some shipments are being made, but the demand is falling off. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—The same remarks in regard to the cement trade apply to this week's business. A good demand is in sight, but, for general unfortunate circumstances, trade is kept back. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The trade in metals this week has been good. No changes in prices have occurred, but all existing ones are firm.

PIG IRON—Several transactions have been reported this week, but trade is not brisk. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75 for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—Business is hardly as good as it was last week. Prices are about the same. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

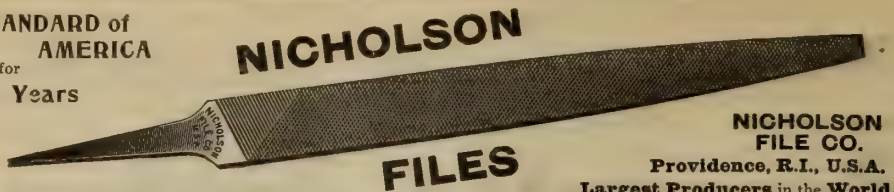
HOOP AND BAND IRON—A slight improvement is noticeable, but business is far from being active. We quote \$2.20 per 100 lbs.

SHEET STEEL—Trade is about the same, with a slight improvement in the demand for the better quality. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

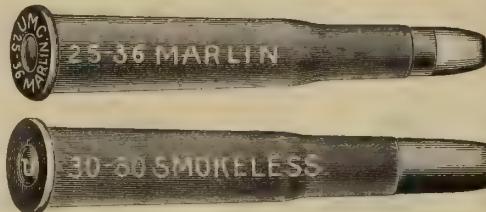
BLACK IRON—Business is good. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade is still good. Shipments from stock are of fair dimensions, and import or factory orders are being freely booked. We quote: Queen's Head (case lots),

STANDARD of
AMERICA
for
30 Years



The Marlin Model 1893



in addition to being made for the 32-40 and 38-55 cartridges, is made of special steel to take our high power cartridges, the 25-36 and 30-30 smokeless.

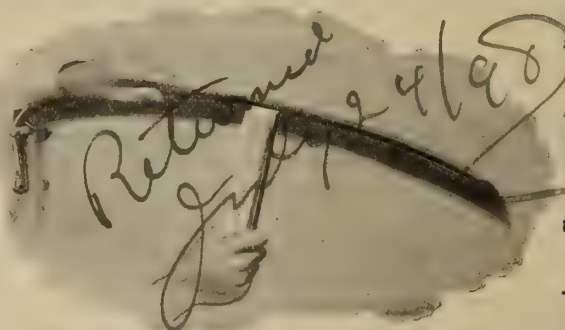
The 25-36 has a 117 grain metal patched bullet with soft lead point, smokeless powder, or a 106 grain metal patched bullet with soft lead point, black powder.

The 30-30 has a 160 grain bullet, either full metal cased or metal patched, with soft lead point, smokeless powder.

If you desire, you can reload the ammunition to suit your purposes, using black powder and a lead bullet with a proper alloy of tin. Cartridges are also ready with light loads for gallery and short range.

Made
in all Styles.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.



To Whet a Scythe...

properly requires a good
Scythe Stone.

Pike's **BLACK DIAMOND**
WHITE MOUNTAIN and
INDIAN POND

are positively the best on earth. **Scythe Stones**

Pike's **Lily White Washita OIL-STONE** has no equal for mechanics' tools.

WRITE FOR PRICES

The Pike Mfg. Co., Pike Sta., N.H.

16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅓ to ¼c. per lb. higher than figures named.

TINNED IRON—Quiet and featureless. We quote as follows: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6⅞ to 7⅝c. per lb.

LEAD PIPE AND TRAPS—The trade is without feature. Orders are for small lots only. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 and 5 per cent. off; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—The demand is steady. Discount is 60 and 10 per cent.

PIG LEAD—The trade is inclined to be quiet. A few large orders have been received, however. We quote ton lots at 3¾c. per lb., and in smaller quantities at 3⅝c. per lb.

INGOT TIN—While the quantity moving

out is a little larger, there is nothing new to report. Prices are firm at 16¼ to 16⅝c.

INGOT COPPER—There is not much doing. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER—Very little doing. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Some good orders have been received this week. Prices are firm. We quote now: Wrought, ¼ to ¾ inch, 1⅞c.; ½ inch, \$2.20 to \$2.25; ¾ inch, \$2.65 to \$2.70; 1 inch, \$3.60 to \$3.65; 1¼ inch, \$4.85 to \$4.95; 1½ inch, \$6.20 to \$6.30; 2 inch, \$8.35 to \$8.50; galvanized, discount 60 per cent.

RANGE BOILERS—Trade is only fair. We quote as follows: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Trade is about the same as it was last week. Enquiries for prices from parties who were not booked for import are arriving freely. We quote: Half-polished, 52 sheets, \$2.50; and all-bright, \$2.85.

TIN PLATES—There has been quite a nice trade doing during the week. It has been principally in large sizes, 20 x 28, and the better quality of plate. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Trade is about the same as We quote: $\frac{1}{4}$ in., $4\frac{1}{2}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—There is a fair demand with no change in prices. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Trade is quite brisk now. A fair number of orders are being received for goods for roofing purposes. We quote: I C, \$6.25 to \$6.50; I X, \$8.

SOLDER—Trade is still fair. We quote: Standard, $10\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—There is no special feature to report. Trade is quiet. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

OLD MATERIAL.

Conditions are not altering in the metal trade. Some wrought was shipped to Mon-

treah again. Dealers continue hopeful of a good fall business. Only a few cars of scrap come forward each week now. The rag trade has also become dull, while the finer metals are in only fair demand. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c per 100 lbs

GLASS.

The Glass Association is working nicely. Although the trade is dull, the outlook for a good fall and spring trade is of the brightest. Fancy glass is in particularly brisk demand, and plate is receiving some attention. The Belgium market is quite firm, and prices are likely to rise, for factories there have all that they can do to supply the demand. First break in 50-foot boxes, \$1.30,

and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

It was the scarcity of dry lead that caused the high price of white lead noted last week. The dealers had no orders for future shipment booked, and consequently none were caught. There is a complete scarcity of castor oil and prices have risen. There is a good demand for ochres and oxides, while stove pipe varnish is also attracting attention. Gold leaf and smalts are in brisk demand. Turpentine has advanced $1\frac{1}{4}$ c. in the south and is quoted at 1c. higher here. Linseed oil has also risen, but is yet very low in comparison with the markets of the United States and England.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.35; No. 1, \$4.97 $\frac{1}{2}$; No. 2, \$4.60; No. 3, \$4.22 $\frac{1}{2}$; No. 4, \$3.85; dry white lead in casks, \$4.70.

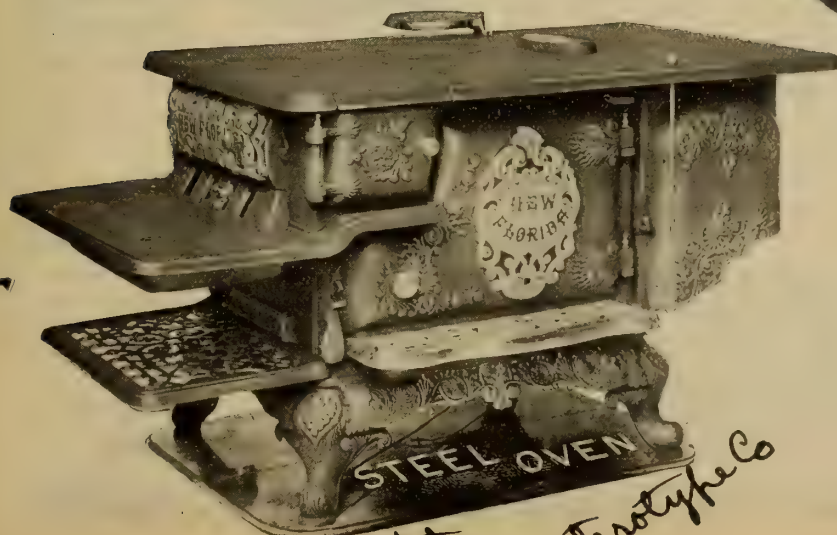
RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4; ditto, No. 1, in casks of 560 lbs., \$3.75; genuine, in kegs of 100 lbs., \$4.25; ditto, in kegs of 100 lbs., No. 1, \$4.

New Bermuda

9-26.—Takes 28-inch Wood.

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



New Florida

9-24.—Takes 27-inch Wood.

POSSESSES all the features of utility and convenience which have made the "Florida" so popular with both dealers and customers during past seasons

Manufactured by...

The D. MOORE CO., Limited

Hamilton, Canada

Write for
New Supplementary Catalogue.

*Delivered to
National Stereotype Co*

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—24c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 43c.; boiled, 1 to 4 barrels, 46c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 44c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

COAL.

Business is much about the same as it was a week ago. There is not much going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

HIDES, SKINS AND WOOL.

HIDES—There has been no noticeable improvement during the week. Business continues dull. Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3. Steerhides: 60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Trade is fair and shows no change. We quote; No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote; Lambskins and pelts, 50 to 55c.

WOOL—Trade is peculiarly regular in this trade, which is considered to be very uncertain just now. Arrivals are no more numerous than they were last week, and so prices are yet from 19 to 20c.

PETROLEUM, ETC.

Trade is only moderate. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14½c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MANITOBA MARKETS.

MARKETS come and markets go, but the hardware trade in Manitoba seems to continue at one price.

Trade, though slow, is steady, and there is nothing new to report. Of course the shooting season is coming on, and the trade in sporting goods is opening, with indications of being very brisk as the season advances. Prices run as follows:

WIRE—In galvanized barb wire the trade is practically closed for the season, the price remaining at \$2.60 to \$2.70 per 100 lbs.; plain wire and staples, \$2.75 to \$2.80.

ROPE—Sisal, lb., 6¼ to 6½c. base; manilla, lb., 7¼ to 8c. base; cotton, ¼ to ½ inch and larger, 16c. lb.

BINDER TWINE—There will be no shortage; in fact, the crop will not be so heavy as at first anticipated. There has been no frost, however.

SHEET ZINC—In casks, 6c. per lb., broken lots, 6½c. per lb.

TIN—Lamb and Flag, 56 and 28-lb. ingots, per lb., 19 to 20c.

TIN PLATES—Charcoal plates, I. C., 10 x 14, 12 x 12 and 14 x 20, \$4.50 to \$4.75; I. X., same size box, \$5.75 to \$6; I. C. charcoal, 20 x 28, 112 sheets to box, \$8.50 to \$9; I. X., box 20 x 28, 112 sheets, \$10.50 to \$11.

TERNE PLATES—I. C., 20 x 28, \$8.50 to \$9.

IRON AND STEEL—Bar iron, 100 lbs., base price, \$2.10; band iron, 100 lbs., \$2.65 to \$2.75; Swedish iron, 100 lbs., \$5.25 to \$6; sleigh shoe steel, \$3 to \$3.25; best cast tool steel, lb., 9 to 11c.; Russian sheet, lb., 12 to 13c.

SHEET IRON—10 to 20 gauge, \$3; 22 to 24 and 26 gauge, \$3.25; 28 gauge, \$3.50.

GALVANIZED IRON—American, 20 gauge, \$4; 22 and 24 gauge, \$4.25; 26 gauge, \$4.50; 28 gauge, \$4.75 100 lbs.

IRON PIPE—Is quoted as follows per 100 feet: ¼-inch, \$2.50; ¾-inch, \$2.75; ½-inch, \$3; ¾-inch, \$4; 1-inch, \$5; 1½-inch, \$7; 1½-inch, \$8.50; 2-inch, \$11.50.

SOLDER—Half-and-half (guar.) per lb.; 14 to 16c.

AMMUNITION—Cartridges, rim fire pistol, American, discount 40 per cent.; rim fire cartridges, Dominion, 50 and 5; rim fire military, American, net list; central fire pistol and rifle, American, 12 per cent.; central fire cartridge, Dominion, 30 per cent.; shot shells, 12 gauge, \$6 to \$7.50; shot, Canadian, soft, 5½c.; shot, Canadian, chilled, 6c. Robin Hood powder, 17-lb. kegs, \$10; ¼ kegs, 4¼ lbs., \$3; canister, 9-oz., 60c. Loaded shells, 12 gauge, soft shot, \$18 per 1,000; No. 10 gauge, \$20.70 per 1,000.

AXES—Per box, \$6 to \$9.

NAILS—Cut, keg, base price, \$2.50 for 20 to 60d., with new classification of extras; common steel wire nails, 4½ to 6 inch, \$2.65 per keg, with usual extras for smaller sizes.

HORSE NAILS—Pointed and finished oval heads. List price as follows: No. 5, \$7.50 box; No. 6, \$6.75 box; No. 7, \$6 box; No. 8, \$5.75 box; Nos. 9, 10 and 11,

\$5.50 box. Discount off above list price 45 per cent.

PAINTS, OILS, VARNISH AND GLASS.

PREPARED PAINTS—Pure liquid colors, per gallon, \$1.15 to \$1.25.

DRY COLORS—White lead, per lb., 7c.; red lead, kegs, 5½c.; yellow ochre, in barrel lots, 2½c.; less than barrels, 3c.; golden ochre, barrels, 3½c.; less than barrels, 4c.; Venetian red, barrels, 3c.; less than barrels, 3½c. American vermilion, 15c.; English vermilion, \$1 per lb.; Paris green, 18 to 19c.; Canadian metallic oxides, barrel lots, 2½c., less than barrel lots, 3c.; English purple oxides, 100-lb. kegs, 4c.; less than kegs, 4½c. per lb.

VARNISHES—No. 1 furniture, per gal., \$1; extra furniture, \$1.35; pale oak, \$1.50; elastic oak, \$1.75; No. 1 carriage, \$1.50 to \$1.75; hard oil finish, \$1.50 to \$2; brown japan, \$1; house-painters' gold size, japan, \$1.50; coach painters' do., \$2 to

SITUATION VACANT.

WANTED A YOUNG MAN AS BOOKKEEPER one that understands the Hardware Business state salary and reference. Address, Box 12, **HARDWARE AND METAL.** (35)

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Cable "LeVesconte" Toronto.

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Stencils or Steel Stamps?

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HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.



Tandem
Anti-Friction

--- Metal

LAMPOUGH
& McNAUGHTON

MONTREAL.

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

\$2.25; No. 1 orange shellac, \$2; pure orange shellac, \$2.50.

SUNDRIES—Glue, S. S., in sheets, per lb., 12½ to 15c.; glue, white, for kalsomin-ing, 16 to 25c.; stove gasoline, per case, \$4; benzine, per case, \$4. Axle grease, Imperial, per case, \$2.50; Fraser's axle grease, per case, \$3.75; diamond, do., \$2.25 per case. Coal tar, per barrel, \$7. Portland cement, per barrel, \$4 to \$4.25; plaster, per barrel, \$3.25; plasterers' hair, P.P., 90c. per bale. Putty, in bladders, barrel lots, 2½c. per lb.; do., in 100 lb. kegs, 2¾c.; do., less than barrels, per lb., 3c. Alabastine, cases of 20 pkgs., \$6.50 to \$7.50, as to color.

WINDOW GLASS—First break is quoted at \$1.75 per box of 50 feet, and \$2 for second break.

LINSEED OIL—Raw, gal., 50c.; boiled, gal., 53c. in barrels; less than barrels, 5c. gallon extra, with additional charges for cans.

TURPENTINE—Pure spirits, in barrels, 55c.; less than barrels, gallon, 58c. An additional charge for packages for small quantities.

OILS—Range about as follows: Black oils, 25 to 30c. per gal.; clear machine oils, 33 to 40c.; cylinder oil, 50 to 75c. as to quality; castor oil, 11c. per lb.; tanners' or harness oil, 65c.; neatsfoot oil, \$1; steam refined seal oil, 85c.; pure winter bleached sperm oil, \$2 per gal.

REFINED PETROLEUM—Prices here are as follows: Silver Star, 18½c.; Crescent, 22½c.; oleophene, 23½c. in barrels. Car lots, 1c. per gal. less. United States oils in barrels are quoted at 27c. for eocene and 24c. for sunlight.

LARGER POWER THAN AT NIAGARA FALLS.

Only a few months have elapsed, says The Electrical Review, since the operation began of the plant for electrically using the power of Niagara Falls. Just lately new contracts were awarded for new apparatus for developing the power of the upper St. Lawrence for distribution by transmission throughout extensive adjacent country. The work will be the largest of the kind yet undertaken, and nearly doubles in magnitude that successfully installed at the Falls of Niagara. The task is entered into after a searching and critical study of the Niagara Falls adaptation, and the same machines, covered by the Tesla patent, will be used as are in place there. English capital is backing the new enterprise, and we believe its engineering and financial success is beyond question.

HARDWARE PRICES.

Such changes in hardware prices as have been made in recent weeks are toward higher quotations. The advance is slight in most cases and the upward tendency is not sufficiently pronounced to become a strong factor in the situation. Nevertheless, it is sufficient when accompanied by a forward movement in goods and a general activity in other lines of merchandise. A continuance of the present activity will mean higher prices unless there should be a marked weakness in basic material.

POOR WORK IN THE SHOP.

ONE of the most troublesome questions that has to be decided in the machine shop is what to do with bad castings and spoiled work, or with work which, while not exactly spoiled, is not right and as it ought to be.

When this question comes up, it seems to be in human nature to scheme on some method by which the casting can be saved, or the work made to go. Especially is this so on large work. It requires more courage to throw out a casting weighing 500 pounds, on which a few hours machine work have been spent, than to condemn a small piece representing several days of labor.

If this course is followed as a regular thing, it is sure to lead to grief sooner or later. Work which is inferior and defective will come to light some time and in a very embarrassing way for those concerned.

There are cases, of course, where the defect amounts to so little that it would be folly to condemn the piece, and oftentimes the job is so valuable that it would be out of the question to throw it out. Concerning these cases, there is generally small chance for hesitation, and it is evident at once what is the best thing to do. Where there is doubt, however, and there seem to be arguments on both sides, a good rule to follow is to throw the work out. A foreman or superintendent, with backbone enough to stand up to this rule, will be on the right track twice where he is wrong once. Moreover, a quick decision to this effect will save time lost in keeping men and machines waiting, and will increase the respect of all concerned for the management, the methods and the quality of the work turned out.

Another phase of this subject comes up when it is intended to have the work interchangeable and it is found that a piece of work is not made to dimensions. The first impulse is to make the other piece to fit and keep a record of the size, which, if it is filed away, is likely to be overlooked when the first repairs are ordered. Within reasonable limits, the only safe way to do is to make

the piece right that is wrong. Two wrongs in machine work do not make a right, and the more firmly this is impressed, the better. —Machinery.

A REVOLUTION IN GLASS MAKING.

Iron and steel manufacturers will be interested in the news just published of a revolution which is progressing in the art of making glass. Molten glass has long been molded into a great variety of ware, but the blow pipe driven by air from a man's lungs has been deemed indispensable for shaping jars and other hollow articles as well as window glass. But a recent invention bids fair to deprive the glass blower of his vocation just as many time-honored craftsmen in the iron trade have found their occupations gone. The first use of the new glass-making machines is in the manufacture of fruit jars at Muncie, Ind. One blowing machine is said to do away with the services of three men, and it is estimated that the same product can be turned out with only two-thirds as many workmen employed. The glass blowers are expected to be able to find employment on account of their expert knowledge about glass, but common labor will be affected. The introduction of these machines in glass making is regarded as fully as revolutionary in that trade as was the introduction of the Bessemer converter and the open hearth furnace in the iron trade, the type-setting machine in the printing business, the self-binding harvester in agriculture, the spinning jenny in the cotton trade, the sewing machine among seamstresses, etc. The window glass manufacturers are anticipating the early perfection of blowing machines for their branch of the trade.—The Metal Worker.

PRIMING ON NEW WOOD.

When the wood you are about to paint is new, the priming should be laid on as thin as possible, to allow of the oil sinking into the wood, on which it exercises a preserving influence. As the thinness tends to delay its drying, if the priming color be one that it is naturally hard to dry, do not mix it with plain linseed oil, but with 1 part of drying oil.



Flat Bridled Brushes

Profitable for you
to handle—profitable for the
painter to use.

Watch that old-fashioned flat,
twine or wire bound brush—see
how it bulges in the centre and
how the paint works through.
Boeckh's Flat Bridled Brush
saves all this trouble.

Illustrated catalogues free.

**Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.**

Plumber and Steam-Fitter

MONTREAL PLUMBERS' PICNIC.

THE first annual picnic of the Journey-men Plumbers' and Steam-fitters' Union of Montreal was held at Ste. Rose Saturday, Aug. 14. They could not have chosen a finer day for their outing. About 1,000 Montrealers took advantage of it.

The master plumbers closed their establishments and took a hearty interest in the picnic.

The following were the judges of the respective games: Mr. Joseph Lamarche, Mr. J. W. Hughes, Mr. P. Carroll, Capt. Ciroux, Col. Massey, Mr. Lesperance, Mr. Crevier, Mr. Rodgers, Mr. James Knox and Mr. Rochon. For the best dancer Messrs. W. M. Briggs, Allan Lisile and C. E. Prevost were judges.

The pavilion was well patronized with dancers.

The following were the winners of the prizes in the various events:

Putting 16-lb shot, members of Plumbers' and Steam-fitters' Union—1, F. Buddo; 2, D. Rochon; 3, W. Crowder.

Putting 16-lb. shot, helpers working with union plumbers and steam-fitters—1, P. McGovern; 2, — Fitzgibbon; 3, J. Rochon.

Throwing 56-lb. weight, open—1, — Thibeault; 2, E. Kavanagh; 3, W. Crowder.

Half mile race, members of the union—1, J. Mullins; 2, J. B. Staton; 3, F. Buddo; 4, B. Mason.

Half-mile, apprentices between two and three years at the trade—1, Hale; 2, Chapman; 3, McGovern.

Running long jump, open—1, McQuisten; 2, Roberts; 3, Boon.

Half-mile, open to clerks and bookkeepers in plumbers' and plumbers' supply houses—1, Gauthier; 2, Roberts; 3, Durant.

Half-mile, open to plumbers' and plumbers' supply house carters—1, Lesperance; 2, Duperent; 3, McDonald; 4, McKeown.

Fifty yards' race, members' wives—1, Mrs. St. George; 2, Mrs. Gardiner; 3, Mrs. Courtney; 4, Mrs. Coffey; 5, Mrs. Dance; 6, Mrs. Mattick.

Boys' race, 12 years and under, 50 yards

—1, E. Russell; 2, A. Robinson; 3, M. Keating.

Girls' race, 50 yards, 12 years and under—1, Miss Russell; 2, Miss Eagan; 3, Miss Rae; 4, Miss Robinson; 5, Miss Blanchard.

Special, boys under 7 years—1, A. Gardiner; 6 others received prizes.

Special, girls under 7 years—1, Miss D. Rae; 6 others received prizes.

Special, girls 12 to 15 years—1, Miss Nelly Mason; 2, Miss Dora Hagerty; 3, Miss Ethel Bray.

Sack race, 100 yards, open—1, Marshall; 2 Blanihan; 3, Noseworthy.

Half-mile, open to roofers and tinsmiths—1, Byrd; 2, Ogilvie; 3, Kelly.

One mile, open—1, Glashan; 2, Marshall; 3, Hale.

100 yards, open to the committee and officers of the union—1, Theriault; 2, Crowder; 3, Rosseau; 4, J. Gardiner; 5, Savard; 6, W. J. Gardiner; 7, M. Foley.

Quarter-mile, open to master plumbers—1, P. Ogilvie; 2, A. Fisher; 3, J. Gardiner.

Long jump, open to members of the union—1, J. Mullins; 2, Duffy; 3, McIntyre.

In the lacrosse match between the Silver Stars and Aberdeens, Mr. D. Rochon was the referee, and Messrs. C. Scanlan and M. Courtney acted as umpires. After a close and well-contested game the Silver Stars won by 2 to 1.

Three-legged race, 100 yards, open—1, Marshal and Noseworthy; 2, Hale and Byrd; 3, Flaherty and Westcott.

Young ladies' race, 75 yards—1, Miss Dora Vallee; 2, Miss Coffey; 3, Miss Nellie Mullins; 4, Miss Annie Coffey.

Fat man's race, 50 yards—1, Mr. Lesperance; 2, Mr. Eagan; 3, H. Lalonde.

100 yards' race, open to married members of the union—1, J. Mullins; 2, A. Theriault; 3, F. Buddo.

50 yards' race, open to members of the union over 25 years at the trade—1, W. J. Gardiner; 2, J. A. Peard; 3, E. Roussell; 4, M. Foley.

The greatest excitement during the whole day was in the game of quoits. There were thirteen entries, the largest number at any ordinary picnic. Following were the scores:

FIRST DRAW.

J. McHugh.....	21	E. O'Connell.....	16
A. Pirrie.....	21	C. Smith.....	15
W. Watt.....	21	A. McIntyre.....	14
Jno. Muir, St. Laurent.....	21	G. Manhire.....	13
Chas. Muir, St. Laurent.....	21	G. Modler.....	17
J. Cuthbert.....	21	And. Boa, St. Laurent	16

C. H. Cottingham, bye.

SECOND DRAW.

W. Watt.....	21	Chas. Muir.....	16
C. H. Cottingham.....	21	John Muir.....	17
J. McHugh.....	21	A. Pirrie.....	12

J. Cuthbert, bye.

THIRD DRAW.

C. H. Cottingham.....	21	J. Cuthbert.....	14
W. Watt.....	21	J. McHugh.....	14

FOURTH DRAW, 31 POINTS.

W. Watt.....	31	C. H. Cottingham...	18
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FIFTH DRAW, 31 POINTS.

J. Cuthbert.....	31	J. McHugh.....	25
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Winners in the match—1, W. Watt; 2, C. H. Cottingham; 3, J. Cuthbert.

GIVE A HOLIDAY WARNING.

A leading plumbing inspector of Pittsburg says a great deal of sickness in the summer is caused by people closing their houses and not attending to the drainage. As a result their houses are infected with bacilli of disease.

He says: "Persons who go away for the summer shut up their houses and when they

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Wrench and Die



ARMSTRONG MAN'F'G. CO.
WATER GAS
AND
STEAM FITTERS
TOOLS



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CATALOGUES ON APPLICATION.

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CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

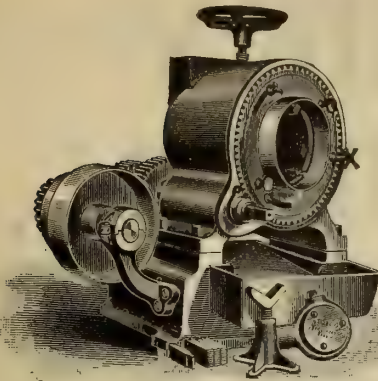
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

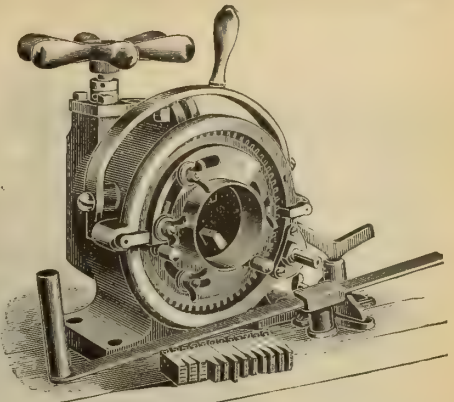
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ -2 inch. R. & L.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.; H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co. Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery. Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL
RUBBER
GOODS

MOULDED
RUBBER
GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

return they find them stuffy and ill-smelling and wonder what causes it. This is all caused by the drainage. The water in the pipes evaporates and the sewer-gas comes through the pipes and infects everything in the house. The house is closed up and there is no place for the gas to escape. The people return home, probably in the best of health. The house and even the bed clothing is infected with the bacilli of disease, and as a result there are one or two cases of typhoid fever or some other disease, and death results. If people will only take a little precaution this can be avoided. A good idea is to place glycerine in the pipes; it will not evaporate and will prevent the sewer-gas from getting into the house. If this is too expensive carbon oil may be used. Glycerine is the best, but carbon oil will do and is considerably cheaper.

"It has been discovered that there is more disease prevalent after people come home from the seashore and mountains than there is before they go away. As has been said before, most of this is caused by the sewer gas that gets into the house while they are closed up, and if the above advice is followed a lot of sickness can be prevented.

"The people who have money enough to go away and close up their houses, surely have enough money to get some oil and place it in the pipes. By rights there should be a law to compel people to take precautions when they leave the city."

REGULATIONS FOR LAYING STEAM PIPES.

GENERAL COLLIS, Commissioner of Public Works in New York City, has issued new regulations covering the laying of steam pipes. This action is the result of complaints recently made about pipes of a company in New York for supplying steam for heating and power purposes, especially about their injurious effect on water and gas pipes. Commissioner Collis instructed George W. Birdsall, chief engineer of his department; Horace Loomis, engineer in charge of sewers, and Stephen McCormick, superintendent of gas and lamps, to draw up new rules. The reports of these officers were submitted recently. Among the suggestions made by Messrs. Birdsall and McCormick are the following:

1. That the pipe and joints be extra heavy;
2. that expansion joints be placed every 50 feet;
3. that it shall be laid on narrow supports every 6 feet;
4. that a box of preserved wood or brick be built around same, allowing a space of at least 6 inches all around the pipe;
5. that the space be packed with the best non-conducting material;
6. that any stop cocks, etc., that come to the surface be boxed, etc., the same as the pipe;
7. that all covers at surface of street shall be noiseless;
8. that no pipe shall be laid within 2 feet of a water main;

9, that no steam service pipe to house shall be laid within 2 feet of a water service pipe.

Mr. Loomis' report in part follows: "In the matter of establishing regulations under which steam supply companies should be required to lay their pipes in the streets to prevent leakage, heating up of the ground around them, the heating up of water mains and loosening the joints, and the discharge of steam into sewers. . . . I would recommend that they be required to lay their pipes in water-tight boxes of four sizes—three sides to be either of masonry or concrete, and to be covered with wood, treated with some preventive, or the whole to be made of wood with tongue and groove joints, made absolutely water-tight; this box to have sufficient space inside to allow of a packing of non-conducting material of 6 inches in thickness all around. I understand that the best material now in use is called rock wool, being a natural wool product, or mineral wool."

PLUMBING CONTRACTS.

Alfred Blais & Co., Montreal, have the contract for the plumbing, heating and ventilating of a house for Mrs. Rosaire.

Carroll Bros., of Montreal, have the following contracts: The plumbing, heating and lighting of a cottage for Mr. Monaghan; the plumbing and heating of four houses for

FAIRY QUEEN..

WOOD and COAL.

OUR New Wood Parlor Stove for 1897. Carving of the latest type of Rococo ornamentation, contour unique, and general construction and outline excellent, relieved with attractive Mica Front Door, Lower Ash Door with swinging Front Grate. The Fire Door is large, with convenient ash catch. Adorned with Nickel Medallion, Fender, Door Knobs, and Hinge Pins. The Rods are on the outside, ensuring durability. In every sense a Parlor stove up to date and very moderate in price.

We shall be glad to furnish prices and give the Trade further information upon enquiry.

The Copp Brothers Co.
Limited
HAMILTON, ONT.



ex-Ald. Cunningham; the plumbing, heating and refitting of a house for ex-Ald. J. C. Robert, and the plumbing and gas-fitting of St. Gabriel's Presbytery, all of Montreal.

H. Mackay, of Montreal, has the contract for the plumbing, heating and ventilating of two houses for William Jacob, and another for the plumbing, heating and ventilating of three houses for James King, Westmount.

E. C. Mount & Co., Montreal, announce the receipt of contracts for the plumbing, heating and roofing of a house for James Long, Westmount, and for the plumbing, heating and ventilating of two stores and dwellings for D. Templeman.

PLUMBING NOTES.

James Atchison is commencing a plumbing business in Montreal.

Mr. W. J. Burroughes, Toronto, is at present in Montreal. His business in Toronto has been closed up. At the auction sale last Wednesday his entire stock, including his office furniture, machinery, etc., was sold, and brought very low prices.

A HINT.

If the brickwork of your new shop front shows a nasty white appearance—it is really an effervescence of sulphate of magnesia—you can get rid of it by washing the surface with a solution of muriatic acid applied with a sponge.

WHY MERCHANTS FAIL.

BRADSTREET'S, than which there is no better authority on general business subjects, assigns the following causes for business failures:

	Per Cent.
Incompetence	16.4
Inexperience	6.1
Lack of capital	33.5
Unwise credits	4.7
Speculation (outside).....	1.2
Neglect of business	3.2
Extravagance	1.3
Fraudulent disposition.....	7.4
Disaster (commercial crisis) ..	22.3
Failures of others	2.9
Undue competition	1.2

Few business men ascribe to the so-called little things of business the importance which seems to belong to them. From this table it appears that twelve out of every thousand fail because they speculate. They may, aside from this, be good business men, they may have good stores, but outside speculation brings twelve to the thousand to the dust. Thirteen out of the thousand is the proportion which fail because of extravagance—failure to look after the little leaks, to keep expenses within a reasonable limit. Forty-seven of the thousand go to the wall because of unwise credits.

There is another lesson in this table for that class of traders who regard sharp com-

petition as an influence against which they are hopeless. Such traders argue that there is no use contending against hopeless odds and give up at once, where in many cases a stiff fight would have won the day. No competitor yet ever had all the good points on his side. Now, this table shows that only twelve out of a thousand fail because of undue competition, which is an exceedingly small percentage in view of the large number of merchants who look upon brisk competition as an unassailable force, meaning their own collapse as surely as night means the shadowing of day.

A CORK TIRE.

Two Tiffin, Ohio, men have invented a new cork tire and a cork saddle. The tire is not a hosepipe with cork packing, but is made entirely of cork. The inventors have experimented largely with it, especially on rough thoroughfares, and believe they have at last found the really practicable non-puncturable tire. One of the claims of advantage set up is the weight, it being much less than the rubber pneumatic. It runs easy, will not puncture, has the resiliency so much desired, and wears well. As for the saddle, it weighs but three ounces, and it is claimed to be as substantial as any saddle in the market. It is said to absorb all moisture from the person in the way of perspiration in hot weather and to be comfortable.

From \$15 to \$375.

The idea is prevalent that we do not sell low-priced cash registers. On the contrary, our line embraces registers as low as \$15, ranging from that figure up to \$375.

We study the needs of each individual purchaser and recommend that register which will best suit his business, whether it be the \$15 or the \$375 register.



No. 17 Register—Price \$15.

Registers amounts up to \$1,000.



No. 99 National Cash Register—Price \$375.

Our new total-adding, check and detail-strip printing registers will now:

1. Register and indicate, at one operation, any amount from 1 cent to \$999.99.
2. Add into one total all the sales made during the day.
3. Automatically issue at the same time a paper check, on which is printed the date, consecutive number of the sale, amount of the sale, initial of the clerk who made it, and the proprietor's business card. On the back of the checks the register prints any advertisement desired.
4. Tell how many sales have been made each day.
5. Tell what time your store was opened in the morning.
6. Keep each clerk's sales or the sales in each department separate.
7. Take care in the same way of credit sales, money paid out and money received on account.
8. Print on a strip of paper inside the register, under lock, a complete detailed record of each transaction as it occurs.

With more than 90 kinds and sizes of registers, at as many different prices, we feel sure we can suit the needs of any merchant.

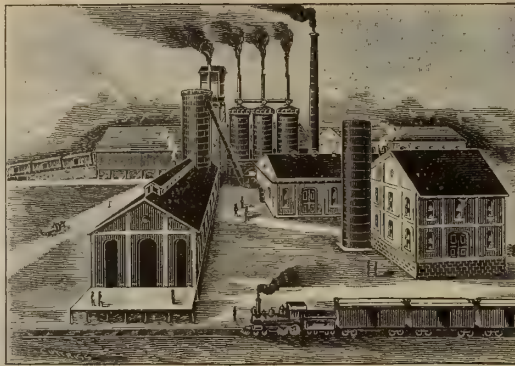
Send a postal card to any of the addresses named below, and one of our salesmen will call and talk the matter over with you. The National Cash Register Company, Dayton, Ohio, U. S. A. Offices in Canada: 6 Rossin Block, King Street, W., Toronto; 1685 Notre Dame Street, Montreal, and Vancouver, British Columbia.

QUALITY WILL COMMAND ITS PRICE

IN a letter on the subject of future cycle prices, Mr. F. Schulte, the managing director of the Triumph Cycle Co., Coventry, England, says: Experienced riders can appreciate a perfectly-built bicycle, and will always be prepared to pay a good price for it. A Greener or Westley-Richards gun, a Bechstein or Erard piano, will always fetch a high price, and it would be the same folly to say such firms have to come down 25 per cent. in price as it is said to-day of high-class cycle firms. A £25 bicycle is quite as good value for money as a £12 one, and the profit on the first is not higher in proportion than on the last. English makers would be quite prepared to come down in price for the highest grade cycles if the public would take standard patterns and American equipment. The pastime is yet young amongst better-class people, who have not had time to get properly acquainted with the different grades of cycles. The time will certainly come when a rider of two or three seasons' standing will not be satisfied until he has the best bicycle money can buy. When people ride to hounds on a £20 thoroughbred or go to the moors with a £5 gun, then, and not till then will a £15 bicycle be considered highest grade.

ANOTHER GOLDEN OPPORTUNITY.

The discovery of rich gold deposits in the far west of Canada appears to be occupying a good deal of attention just now. Miners laden with their yellow spoils have already returned from the inhospitable regions in which the metal has been found, and from their accounts there can be little doubt that the scenes of the Californian goldfields are in a fair way to be reproduced. We may now expect to hear of the formation of companies to exploit the country, and machinery and tools of all kinds will inevitably be required. Incidentally, it should be borne well in mind that the man who supplies the baser metals for the purpose of recovering those which are rare invariably comes off better than the man who depends for his living upon the richness of undeveloped strata, even though they be gold-bearing. Makers of mining and other machinery of the kind necessary for the purpose should, therefore, lose no time in sending responsible agents to the Klondyke district with every facility for the prompt transmission and execution of orders. Canada's new tariff has apparently come just in time to enable the Old Country to make a vigorous bid for the supplying of the necessary plant, and the British manufacturer will have only himself to blame if he does not successfully exert himself to obtain that portion of the



The Hamilton Blast
Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

**HIGH GRADE
PIG IRON.**

WHY IS IT THE ROYAL

Cold Blast Safety Lantern

IS SUPERIOR TO ALL OTHER MAKES?

Because it has a larger air chamber, causing a better combustion and producing a white steady flame which is wind-proof.

Because it HAS NOT a spring in the top of the Lantern which becomes useless on account of the heat taking the temper out of the wire.

Because the Globe is raised and lowered by the crank movement, dispensing with a tube down through the oil well, which causes the Lantern to leak after being in use a short time.

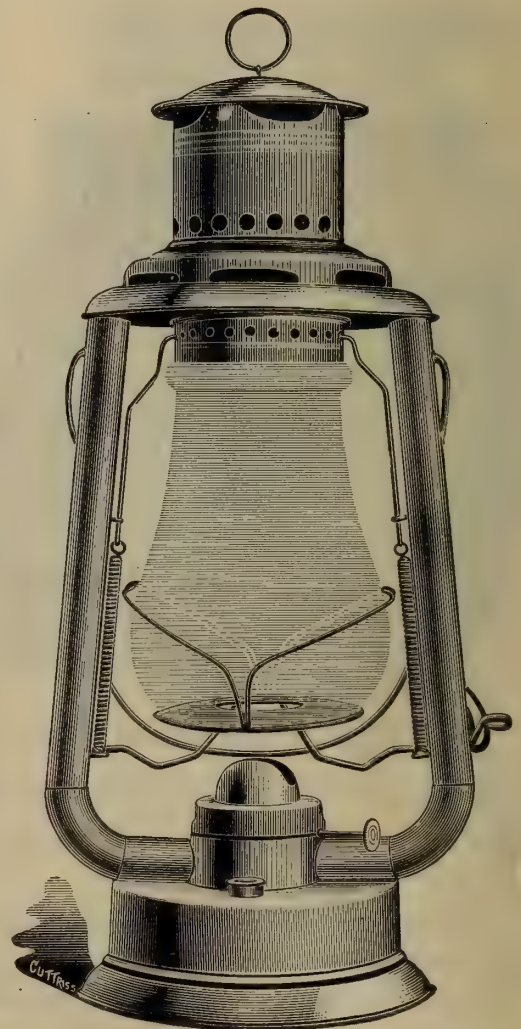
Because the "ROYAL" has a larger oil well and a larger feeder cap than other Lanterns.

ESPECIALLY adapted for Steamboats, Miners and Fishermen, and for use in exposed places. Gives double the light of an ordinary Lantern, and will Not Blow Out.

Patented in Canada and the
United States.

FOR SALE...

by leading wholesale Crockery and Hardware Merchants throughout the Dominion.



BANNER LAMP BURNERS ARE THE BEST.

new business which his brothers across the sea are only too eager for him to secure.—Vulcan, in Ironmonger.

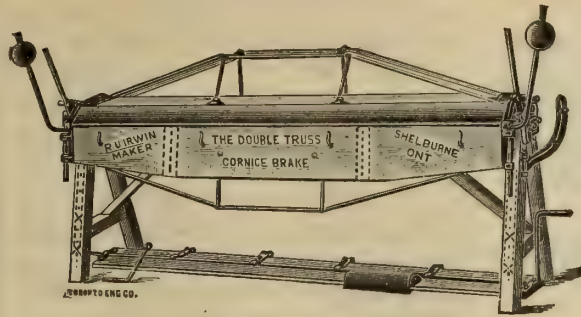
THE UP-TO-DATE BURGLAR.

The burglar must now be a scientific man to burgle successfully. A bungling burglar is a disgrace to his profession, and no use to anybody. For the future it will be necessary for him to go through a course of electrical engineering, so that he may warily walk around the snares of his adversary. Of course, America is his happy hunting ground, and in consequence, the Bankers Electric Protective Co., Chicago, has been called into existence. That the midnight depredator can burn "hand holes" through six or more inches of steel, iron or bronze has been proved beyond the shadow of a doubt. The Protective Co. herein alluded to have recently been showing the Chicago bankers what can be done in this way. They drilled holes in safes, in less than five minutes, with a few feet of wire and a rod of carbon. The current was taken from the Edison three-wire incandescent system, and from 220-volt service. One of the safes was made of six plates of five-ply drill-proof chrome steel and one plate of soft steel $3\frac{1}{2}$ inches thick. Another was made of gun metal, drill-proof, and also $3\frac{1}{2}$ inches thick. In fact, there can be "no possible, probable doubt" that it can be done, and the problem is to circumvent this scientific cracksmen.

PERMANENT WHITEWASH.

A correspondent of a German paper says that a few years ago it was decided to whitewash the walls and ceiling of a small cellar to make it lighter. For this purpose a suitable quantity of lime was slacked. A workman who had to carry a vessel of common salt for some other purpose, stumbled over the lime cask and spilled some of his salt into it. To conceal all traces of his mishap he stirred in the salt as quickly as possible. The circumstance came to my knowledge afterward, and this unintentional addition of salt to the lime excited my liveliest curiosity, for the whitewash was not only blameless, but hard as cement, and would not wash off.

After this experience I employed a mixture of milk of lime and salt (about three parts of stone lime to one part of salt), for a court or light wall. To save the trouble and expense of a scaffold to work on, I had it applied with a hand fire-engine (garden syringe?) to the opposite walls. The results were most satisfactory. For four years the weather has had no effect upon it, and I have obtained a good and cheap means of lighting the court in this way.



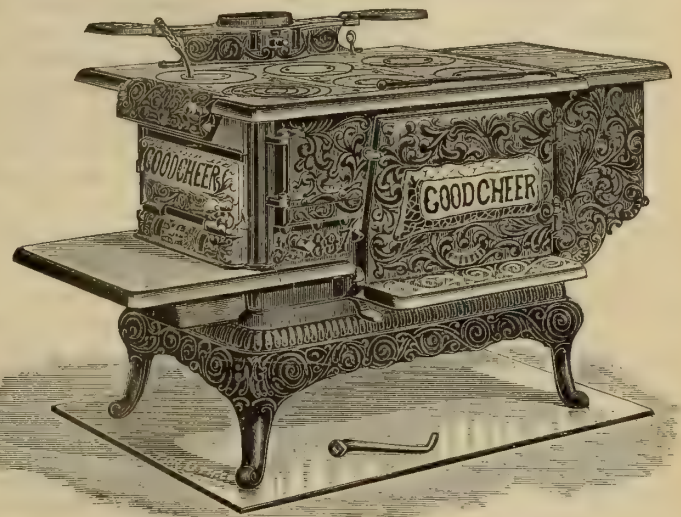
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Beader for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

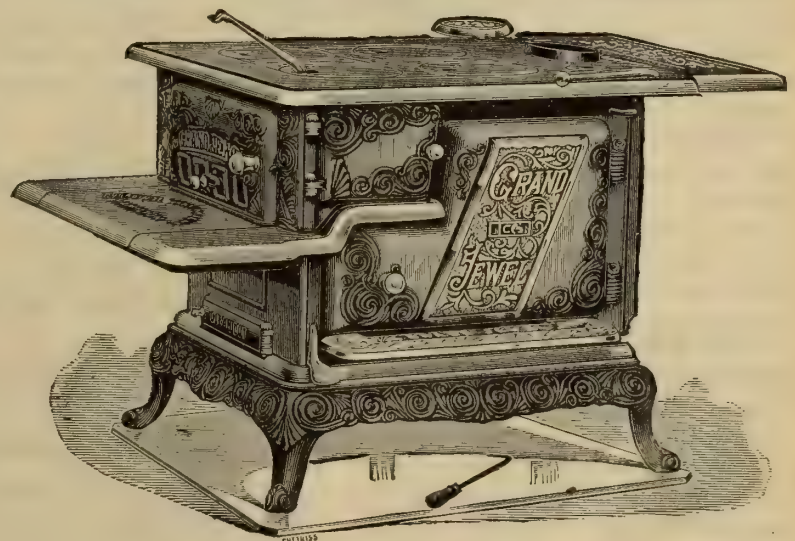
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With Patent One-piece Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Provinces of Quebec, Nova Scotia, New Brunswick and Prince Edward Island.

W. L. Haldimand & Son, MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

PEARCE & CO., general merchants, Petrolea, Ont., are offering to compromise at 75c. on the dollar, cash.

Paquet & Fils, joiners, Quebec, are seeking an extension.

Catherine Hartling, general merchant, Hazel Hill, N.S., has assigned.

Didas Bouchard, St. Anne des Monts, Que., general merchant, has assigned.

J. B. Stapleton & Co., general merchants, Port Hawkesbury, Que., have assigned.

Angus McAskill, general merchant, St. Peters, Que., is offering to compromise.

A. A. Hunter, general merchant, Brome, Que., is offering to compromise at 25c. on the dollar.

L. H. Timmins & Bro., general merchants, Mattawa, Ont., have assigned to D. A. Dunlop.

Hogg & Habbick, dealers in coal, Waterloo, Ont., are offering to compromise at 30c. on the dollar.

A meeting of the creditors of E. W. Matthews & Co., bicycle dealers, Montreal, was held on the 19th inst.

Charles Deverell, general merchant, Ravenshoe, Ont., is offering to compromise at 40c. on the dollar.

Thomas M. Fraser, general merchant, Lower Southampton, N.B., has sold out and is offering to compromise at 30c. on the dollar.

PARTNERSHIPS FORMED AND DISSOLVED.

Caisson & Lacombe, plasterers, St. Henri de Montreal, have dissolved.

Cote, Deschamps & Co., hardware merchants, Montreal, have dissolved partnership.

H. A. Marceau & Co., hardware merchants, St. Henri de Montreal, have dissolved.

The Huffman & Gibson Coal Co., Brantford, Ont., have dissolved. D. S. Gibson continues.

Henri P. Bruyere and Godfroi Bruyere have formed a partnership in Montreal to do business in oil under the style H. P. Bruyere & Cie.

Gedeon Poirier and Moise Girard have formed a partnership in Sutton, Que., to trade as blacksmiths, under the style of Poirier & Girard.

Joseph R. Cote and Joseph A. Lalime have formed a partnership in Montreal to do business under the style of the Dominion Fire Extinguisher Co.

Pierre Romuald Legendre and Arthur Chayer have formed a partnership in Montreal to trade as contractors, under the style of Legendre & Chayer.

James M. Mitchell and Angus MacLean have formed a partnership in Old Bridge-

port, N. S., to trade as general merchants under the style of Mitchell & MacLean.

Damaz Laine, Henri Carrier and Jos. E. Roy have formed a partnership in Levis, Que., to trade as founders, machinists, etc., under the style of Carrier, Laine & Co.

SALES MADE AND PENDING.

The general stock of Moore & Kerr, Orillia, has been sold.

The general stock of Alf. Caron, St. Pamphile, Que., has been sold at 51 1/2c.

H. G. McLean, blacksmith, Harvey, Ont., is offering his business for sale.

Edward Evans, blacksmith, Creswell, Ont., is advertising his business for sale.

The Londonderry Iron Co., Limited, Montreal, are selling out and liquidating.

Wm. Drury, coal and wood merchant, Kingston, Ont., is offering his business for sale.

The general stock of Mrs. W. A. Sherwood, Bristol, N.B., is advertised for sale under bill of sale.

The assets of Joseph Lapierre, general merchant, St. Antoine, Que., are to be sold at auction on the 20th inst.

CHANGES.

Torrance & Muir have started a coal business in Montreal.

Mabel L. Zeller, general merchant, Merlin, Ont., is removing to Zurich.

Beal Bros., lumber merchants, Grand Forks, B.C., have sold out to E. Spraggett.

A. Methot & Co., general merchants, St. Roch des Aulnais, Que., has bought the stock of A. Caron, St. Pamphile, Que.

Louise A. Corbeil, wife of Benjamin Joubert, has been registered proprietress of the business of B. Joubert & Co., painters, Montreal.

Dame Ann Epworth, widow of Charles Giddings, has been registered proprietress of the Canada Wood Turning and Novelty Co., Montreal.

FIRES.

John T. Harvie, lumber merchant, Gravenhurst and Burk's Falls, Ont., has had his mill at Burk's Falls burned.

DEATHS.

George Sharp, coal and wood dealer, Toronto, is dead.

Octave L. Lapointe, general merchant, St. Rose du Degale, Que., is dead.

PERSONAL MENTION.

Mr. Thos. Mortimer, manager of M. & L. Samuel, Benjamin & Co.'s cutlery department, has left for the Adirondack Mountains, where he will spend his vacation.

Mr. F. W. S. Davis, the popular traveler for Sanderson Percy & Co., Toronto, has taken a well-earned holiday and is spending a week with his mother at "Maplehurst," Mitchell.

DOMINION FLINT PAPER CO.**Hamilton, Ont.**

Supplying the Canadian demand with Improved Paper to sand paper the whole Dominion.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Steel Roof, West Block, Ottawa," will be received until Tuesday, 24th inst., for the construction of a steel roof over a portion of the West Block Departmental Building, Ottawa.

Plans and specification can be seen and form of tender and all necessary information obtained at this Department.

Persons are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honourable the Minister of Public Works, equal to five per cent. of amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

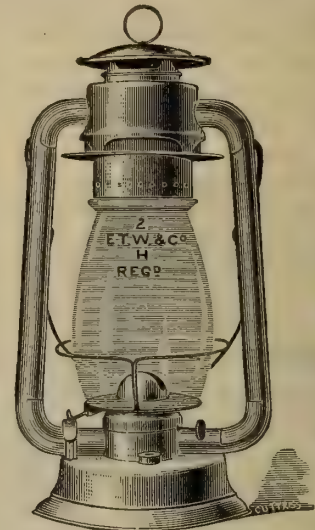
E. F. E. ROY,
Secretary.

Department of Public Works, }
Ottawa, Aug. 6, 1897. }

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (34)

E. T. WRIGHT & CO.Manufacturers
of...Tubular and
Cold Blast
LanternsBird Cages
Mouse Traps
Flour SiftersStamped
Re-tinned
and Japanned

..TINWARE

**HAMILTON - CANADA.**

If you handle : : :

Wolff-American
High Art **Cycles.**

.. AND ..

YALE CYCLES

You can suit all tastes
and all prices.

Representatives

Dorken Bros. & Co.**MONTREAL.**

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

U. S. PIG IRON PRODUCTION.

THE Iron Age, in its monthly summary of the pig iron production says:

There have been quite a number of changes in the active blast furnaces; but, on the whole, production has varied but little from recent totals. Reports are at hand concerning the starting of additional furnaces, but these have occurred since the opening of this month. The tendency is toward a larger output. The weekly capacity of the furnaces in blast on August 1 compares as follows with that of preceding periods:

	Furnaces in Blast.	Capacity Per Week. Gross tons.
August 1, 1897	152	165,478
July 1	145	164,064
June 1	146	168,380
May 1	146	170,528
April 1	153	173,279
March 1	156	169,986
February 1	154	162,959
January 1	154	159,720
December 1, 1896	147	142,278
November 1	133	124,077
October 1	130	112,782
September 1	145	129,500
August 1	173	157,078
July 1	191	180,532
June 1	194	182,220
May 1	196	189,398
April 1	200	187,451
March 1	207	189,583
February 1	215	198,599
January 1	241	207,481
December 1, 1895	242	210,797
November 1	239	217,306
October 1	232	204,414
September 1	215	194,020
August 1	200	189,525
July 1	185	171,194
June 1	172	157,224
May 1	171	159,554
April 1	171	158,132
March 1	173	159,979
February 1	179	163,391

In comparison with previous months the record of the coke and anthracite and charcoal furnaces stands as follows in gross tons:

	Number in blast.	Capacity per w.k.	Fur'ces in blast.	Capacity per w.k.
August 1, 1897	132	161,375	20	4,003
July 1	131	161,170	14	2,804
June 1	131	165,059	15	3,321
May 1	133	166,799	13	3,729
April 1	137	167,911	16	3,368
March 1	138	164,561	18	5,425
February 1	136	157,815	18	5,144
January 1	135	154,264	19	5,456
December 1, 1896	128	137,096	19	5,182
November 1	112	119,094	21	5,083
October 1	105	105,520	24	6,562
September 1	124	123,271	21	6,220
August 1	150	150,814	23	6,264

The position of stocks, sold and unsold, as reported to us August 1, was as follows, the same furnaces being represented as in former months:

	Mar. 1.	June 1.	July 1.	Aug. 1.
Stocks—				
Anthracite and coke...	837,583	886,318	823,108	756,955
Charcoal.....	186,020	183,934	181,504	177,003

Totals.....1,023,603 1,070,252 1,004,612 933,958

This shows a reduction during June and July.

AN IMPROVED CASH REGISTER.

The National Cash Register Co., of Dayton, Ohio, U.S.A., have just added some improvements to their No. 79 registers, which make them available in stores where it is sometimes necessary to register transactions amounting to more than \$100. The registering capacity of these machines has been increased from \$99.99 to \$999.99, while at the same time it is possible to keep a separate account of the sales in the different departments of the store, or to keep separate the sales of each clerk in the store. This should open up a new field for the use of the cash register.



VanTuyt & Fairbank

Petrolia, Ont.

Headquarters for...

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

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Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.		Per lb.
Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10

Augers.		
Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	5 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.		
Sewing, per gross.....	0 85	1 59
Pegging, ".....	0 85	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddler's, per gross.....	0 45	1 60

Awl Hafts.		
Patent Peg, oss.....	7 25	8 00
Sewing, per gross.....		

Awl and Tool Sets.		
Millar's Falls, per doz.....	2 80	3 30

AXES.		
Splitting Axes.....	5 25	5 50
Chopping Axes—		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50

Axle Grease.		
Per gross.....	6 00	13 00

Bath Tubs.		
Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount.		

Bells.		
Hand.....		
Brass, 60 per cent.		
Nickel, 55 per cent.		

Door.		
Gon Sargent's.....	5 50	8
Peterboro', discount 50 per cent.		

Cow.		
American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.		
American, each.....	1 25	3 00

House.		
American, per lb.....	0 35	0 40

Bellows.		
Hand, per doz.....	3 35	4 75
Moulders', per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.		
Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.		
Per doz.....	5 00	6 00

Bits.		
Auger.....		

Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p. c. discount.		

Car.		
Gilmour's, 47½ to 50 per cent.		

Expansive.		
Clark's, per cent.		
Excelsior, 10 per cent.		

Gimlet.		
Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.		
Annex, per doz.....	1 25	1 75
Mascoti, ".....	1 35	1 85
Erminie, ".....	1 12	1 20

Blind and Bed Staples.		
sizes, per lb.....	0 7½	0 12

Bolts.		
Carriage, dis., 70 p. c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 per cent.		
Elevator, dis., 45 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.		
Complete, with augers, each.....	5 00	7 50

Braces.		
Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Mar's Falls.....	15 50	29 00

Brackets.		
Shelf.....		
Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20

Broilers.		
Light, dis. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, ".....	6 00	
Henis, No. 9, ".....	7 00	
Queen City.....	7 50	10 00

Butchers' Cleavers.		
From 8 to ch, per doz.....	4 23	

Butts.		
Brass.....		
Wrought Brass, dis., 17½ p.c. revised list.		

Cast Iron.		
Loose Pin, dis. 70 per cent.		

Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65

Can Openers.		
Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50

Card.		
Horse, per do.....	0 60	1 00

Carpet Stretchers.		
American, per doz.....	1 00	50
Bullards, per doz.....	6 50	

Carpet Sweepers.		
Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star.....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00

Cartridges.		
(See Ammunition.)		

Castors.		
Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		

Cattle Leaders.		
Nos. 31 and 32, per gross.....	8 50	9 50

Cement.		
Canadian, Portland.....	2 50	
English.....	2 75	
Belgium.....	2 50	
Canadian hydraulic.....	1 10	
Figures are for carload lots.		

Chalk.		
Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18

Chisels.		
Socket, Framing and Firmer.		
American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00

Churns.		
Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		
Steel, net.....	3 00	

Clamps.		
Judds, dis. 20 per cent.		
Stearns, per doz.....	3 00	10 00

Clips.		
Axle dis. 65 per cent.		

Coffee Mills.		
Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....	70	

Compasses, Dividers, Etc.		
American, dis. 62½ to 65 pe cent		

Cradles, Grain.		
Canadian dis. 25 per cent.		

Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.		
Torrey's Rod, per doz..... (15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00

Draw Knives.		
American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.		
Hand and Breast.		
Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.		
Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 to 50 and 5 per cent.		

ELBOWS.		
Stovepipe.		
Per doz.....	75	1 70

FAWCETS.		
Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star, ".....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50

FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 per cent. to 50 10, 5.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.		
Each.....	0 60	2 00

FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		

FREEZERS.		
Ice Cream.		
Gem, from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.		
Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.		
Acme, dis. 65 to 67½ per cent.		

GAUGES.		
Marking, Mortise, Etc.		
Stanley's, dis. 50 to 55 per cent.		

Wire Gauges.		
Winn's, Nos. 26 to 33, each.....	1 65	2 40

GLASS.		
Window.		
Box Price.		

Star.		
Size United Inches.		
Under 25.....	1 30	2 50
26 to 40.....	1 40	2 70
41 to 50.....	3 00	4 50
51 to 60.....	3 30	5 00
61 to 70.....	3 60	5 50
71 to 80.....	4 00	6 25
81 to 85.....	4 50	7 25
86 to 90.....	8 25	
91 to 95.....	9 25	
96 to 100.....	10 75	
101 to 105.....	12 25	
106 to 110.....	14 25	

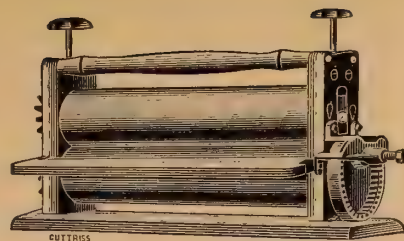
GLUE POTS.		
Tinned, each.....	0 30	
Eoamelled each.....	0 55	

GRINDSTONE FIXTURES		
P. S. & W., per doz.....	3 30	4 00

HAMMERS.		
Nail		
Maydole's, dis. 5 to 10 per cent.		
25 to 27½ per cent.		

Tack.		
Magnetic, per doz.....	1 10	1 20
Store door, per doz.....	1 00	1
Chest, per doz. pairs.....	0 40	2 50

Sledge.		
Canadian, per lb.....	0 07½	0 08½



THE IMPROVED DOMESTIC MANGLE

Something new and good—**INTERNAL GEAR**—strong and convenient—meets all ordinary requirements—is not expensive—should be in every home. Buy before the hot weather arrives. Send for samples and prices.

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Managing Director and Treasurer

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for
1897

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Hardware and Metal, Toronto

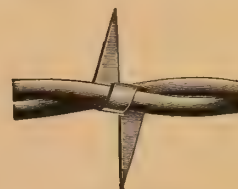
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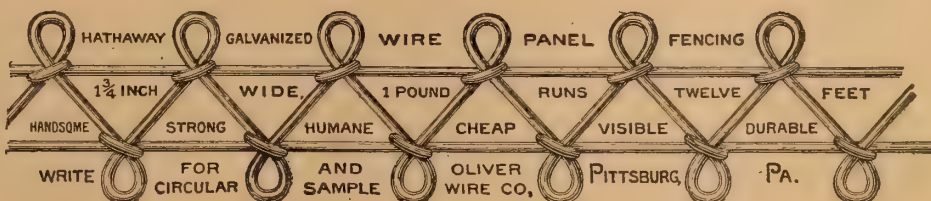
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G. & H. Barnett Company

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"Maltese Cross," "Extra Quality," (Black or White).

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61-63 FRONT ST. WEST, TORONTO.

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And why not?—They are made of the **right** materials—mixed in the **right** proportions by the **right** men, so that they must be **all right**.

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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, AUGUST 28, 1897

No. 35



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Best Anti-Friction Metal for all Machinery Bearings

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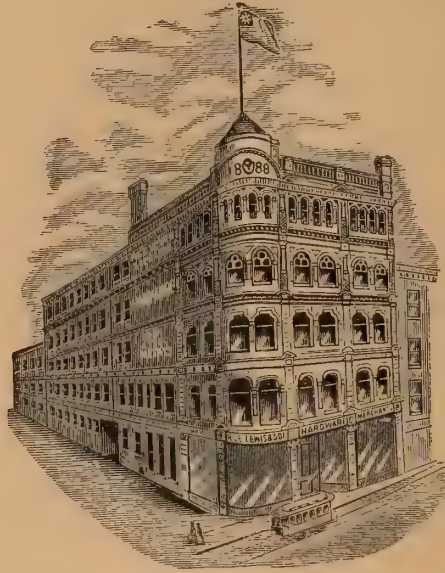
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Hot and Cold Water Supplied to Bath and Basin.
Waste from Basin DOES NOT Discharge into Bath.

SEND FOR PRICES

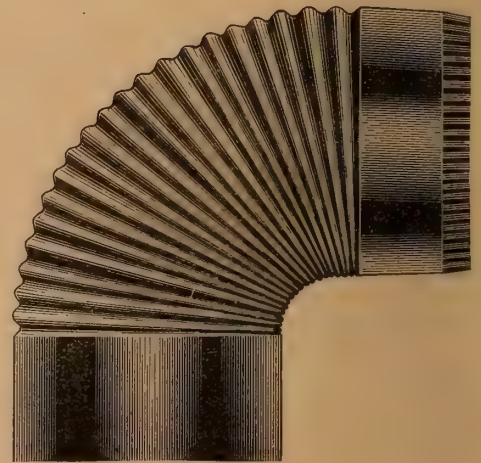
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STANDARD
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Elbows



ARE JUST WHAT THE TRADE REQUIRES.

Made in two qualities—

No. 1.—Heavy Smooth Iron, Long Ends.

No. 2.—Ordinary Iron, 1/4-inch Shorter Ends.

Present a most attractive appearance. Riveted ready for use. Cannot get damaged in shipping. Packed one dozen in a crate. Can be bought as cheap as ordinary pieced elbows.

Kemp Manufacturing Co.

Gerrard and River
Streets

TORONTO.



Vol. IX.

MONTREAL AND TORONTO, AUGUST 28, 1897

No. 35

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A FAVORABLE OUTLOOK.

THE farming community are the fundamental basis of the economic structure in Canada. Accordingly, when the farmers are prosperous, it is obvious that the conditions should favor prosperity in all other branches of business. If there ever was a year when fortune smiled on the agriculturist the present is one, and for this reason the business outlook is considered very bright. In almost every branch of produce in which the farmer is interested, high prices are the rule. He is getting more for his cattle, for the produce of these same cattle, for the fruits of the earth, in fact, everything that he markets.

Live stock and their produce are perhaps, apart from the growing of grain, the most important department of farming in Canada; to the provinces of Ontario and Quebec the most important. Take the production of dairy produce, a leading subdivision, and it is found that the year is a record one. The exports of cheese since the first of May from Montreal exceed those of last year by 212,000 boxes. In other words, the farmers have marketed so far this year 964,000 boxes of cheese which at the average price, $8\frac{1}{2}$ ¢., returned them \$5.95 per box, or

\$5,754,800. Last year, during the same time, they exported 751,000 boxes at an average price of $7\frac{1}{2}$ ¢., or \$5.25 per box, and realized \$3,942,750. They have, therefore, increased their earnings this year by \$1,812,000 in this one item alone. Butter has the same favorable showing. The exports this season from Montreal since the 1st of May exceed those of last year by 18,264 packages, and the average price has been $1\frac{1}{4}$ ¢. per lb. higher. Butter has returned to the farmer, for the four months of the present year, about \$586,700, the average price being 17¢. per lb., against an average price last year of $15\frac{1}{2}$ ¢. and a return of \$356,964. On cheese and butter alone, therefore, the farmers of Ontario and Quebec have made in four months \$6,134,500, or almost \$2,000,000 more than for the same four months of 1896.

These figures are certainly very encouraging, and all the more so as they are strongly supplemented by favorable conditions in other directions. For instance, Ontario red wheat sold at 95¢. for export the other day in Montreal, whereas it was offering freely for 50¢. and less a year ago. Flour is almost \$2 per barrel higher than it was this time last year. Oats realize $28\frac{1}{4}$ ¢. to-day against 26¢. a year ago. Eggs 11¢., against 9¢., and so on throughout the list.

In other directions signs of revival are not wanting. The bank statement for the past month is an illustration of this. The statement for July presents the rather unusual condition of a large increase in circulation being accompanied by a reduction in the volume of loans to the public. This can only be ac-

counted for on the supposition that the shortening of credits in many lines of wholesale trade, and the more general adoption of the cash system in retail business, has caused more ready cash and less banking accommodation to be called for in the transaction of the country's business. The circulation has this year reached the highest figure since the year 1893, when it stood at \$33,573,468, against \$32,709,475 for the present year.

Another striking feature about the bank statement is the continued increase in deposits. This movement in the accumulation of deposits has been peculiar, inasmuch as it has steadily progressed ever since the year 1890. Each month of the year since that time has witnessed an increase over the corresponding month of the preceding one. They now show a total of \$205,108,185, a growth of over \$18,000,000 in the twelve months. Another sign of confidence is the increase in the amount of balances due from foreign countries from \$16,713,630 a year ago to \$22,745,589. There are also heavier balances due from Great Britain by \$3,312,174 than a year ago.

MERCHANTS AND INFLUENCE.

The force of example in a merchant no one can measure, for upon what manner of man he is will largely depend what manner of men the clerks are he turns out.

It does not necessarily follow that because a certain merchant is dishonest in his methods of doing business his clerks will be likewise afflicted, but his influence will certainly tend to make them such.

It does not necessarily follow that because a merchant's business methods are bad

his clerks will become bad business men, but his influence will tend to make them such.

It does not follow that because a merchant is lazy his clerks shall become so, but his influence will tend to make them such.

A thing molded takes the shape of the mold in which it is cast, and the clerk the form and shape to which he is fashioned by his employer.

Merchants, be careful of your influence.

A COMPLAINT AGAINST CANADA.

A gentleman with the elaborate name of Arthur de Noe Walker has a letter in The London Chronicle of August 4, in which he sets forth a not very high opinion of Canada.

Mr. Arthur de Noe Walker, be it known, is writing about something regarding which he possesseth knowledge: He has two sons in Canada, one at Calgary and another at Vancouver.

But so meagre are the resources of this Dominion of ours that Mr. Arthur de Noe Walker's two offspring would not be able to live were it not for the financial aid they receive from "at home."

Here are his exact words: "I may remark that neither of them could live out there without a yearly sum sent out to them."

Poor little dears! Papa should call them home.

What Canada wants more than anything else is population, but we could well afford to give Mr. Arthur de Noe Walker back his two sons. The trouble is not with the country but with them.

Canada is no place for "remittancers" pure and simple. We want men with brawn and muscle, men with energy and enterprise. If in addition to these qualities they bring money they are still more welcome. But we do not court those who are rich in money and poor in brains and brawn. They are hindrances rather than helps to the development of the country.

If it were possible to place an order with the Creator to make us another Dominion of Canada we could scarcely ask Him to make it different from what it is.

We have untold wealth of sea, lake and stream, of forest, field, and mine.

Generally speaking, no country is more richly blessed in those natural resources

necessary to the foundation of a great country, and the man who cannot make his living here is either an idiot or an idler.

RUPTURES WITH CUSTOMERS.

ALTHOUGH in the hardware business the retailer is not so liable as in some other trades to lose his customers' confidence through inferior goods, yet he cannot prevent sometimes selling articles that do not fulfil their guarantee.

Unlike the grocer, the hardware merchant has no canned goods to sell. These goods demand the strictest attention in keeping in the store, and a big risk of selling spoiled eatables is run. Goods are not always rendered unpalatable by the grocers' carelessness; it is more generally due to the faulty canning system. However, to remain on good terms with his customer the grocer is compelled to consider any complaints of such goods, and in most cases replace the useless brand by a good substitute. But this is only one line of goods in which the grocer has to give substitutes; most of his shelves are filled with goods that are often unsalable either through ill-effects of time or careless packing.

The hardware merchant does not carry a general line of perishable goods. Almost every article he sells can be handled, examined and estimated in value. Still the retailer, even in this trade, has some complaints of a similar nature to those of the grocer, and they are numerous enough to merit some consideration.

There is one fortunate difference between the customers of the two trades and this renders faulty goods less dangerous to the hardwareman than to the grocer. The grocer's patronage consists chiefly of ladies, while the other merchant has most dealings with men. Now, these two classes of customers don't agree in regard to the merchant's responsibility for these faulty goods. A lady will insist on having good value for good value, while a man will consider the merchant's interests and, if he considers any faulty goods that he may have purchased have been rendered so through no carelessness on the part of the retailer, he will lodge no complaint and the relations between the two will not be strained.

However, any hardware merchant will tell you that all men are not like those ideal

ones, and the question is then how must a customer be treated who brings back a screw-driver, or anything else you may choose, which he says was broken only in use legitimate for such articles and claims another. The only answer seems to be: Give a substitute. Of course there are various things to be considered before arriving at this conclusion. Is the customer's trade worth keeping. If not, do not give the substitute. It is a matter of policy to substitute a good article for a bad one, and is not done to ease one's conscience. It goes without saying also that no merchant can afford to substitute a good stove for one that has cracked too soon. In that case arrangements can be made.

Now, this policy is certainly a difficult one to pursue. Many merchants will say that they cannot afford such actions. Well, if they can't, they may as well leave the procession at once, for their competitors are obliging their customers with substitutes. If they cannot afford to act thus, they cannot afford to let a customer transfer his patronage. If the merchant has the requisite determination to carry on business successfully, he has surely the aptitude and the patience to acquire this habit.

Then, again, the retailer and his customer often differ in opinion as to whether a bill is paid. This occurs generally over small bills, as accounts of large amounts are too promiscuous to be forgotten or overlooked, so that we shall consider only small accounts. A gentleman or lady, then, comes into the hardwareman's store with a bill in his or her hand, which he or she has received through the post from the merchant, and which he or she thinks has been paid. What must that merchant say? Certainly he can urge his case, but at the conclusion of the conversation the closing sentence best fitted for his purposes seems to be: "Well, perhaps it was paid, and either I or my clerk forgot to note the payment; at any rate, if you think it was settled we'll say no more about it." In this way he will not be forced to crawl out of a very large hole the next day if the customer should perchance bring in a receipted bill.

It seems hard to resign a claim to money when the ownership is acknowledged even in one's own mind only, but, as has been said, whatever good things your competitors do, that must you do.

HEAVY MATERIAL ADVANCING.

If their own operations are any fair criterion at all, the rolling mill men and iron manufacturers generally expect a good fall and winter trade. They have been heavy purchasers lately, especially of wire rods and steel billets, and, as it turns out, hit the market right, as values on both these lines of raw material have advanced from 40 to 50c. per ton since the contracts were closed. Some idea of the quantity of heavy material that has been acquired by manufacturers lately may be gathered from the fact that individual commission men have within the past ten days or so placed no less than 1,500 tons of wire rods and 1,000 tons of steel billets with mills in Montreal. These operations certainly look like a good business this fall, and, what is more, with advances of 40 to 50c. per ton in raw material, it will be surprising if the manufacturers neglect the opportunity to try and boost prices a little from their present low level. With wire rods costing 50c. a ton more, advances in wire nails and lines of which wire rods constitute the raw material are not unlikely. It

is interesting to note in this connection that in only one line of heavy material have the preferential clauses of the new tariff been instrumental in turning orders from United States to British sources. Pig lead was the solitary exception, the English and American prices of the metal being so close together that the preferential duty led to increased demand for the former.

In all other lines of heavy material American supplies that were coming in previous to the change are still doing so, as their comparative cheapness and advantages in freight charges offset the duty preference. That this will be so if there is any radical advance in the level of values in the States as a consequence of the promised revival in business is unlikely, especially as the British goods get an additional one-eighth preference after the 1st of August, 1898.

TORONTO PLUMBERS' ASSOCIATION

A meeting of the Toronto Master Plumbers' Association was held in Pythian Hall last Monday evening. The resignation of Mr. Burroughes, who has been president of the society, was received and accepted. Mr. J. B. Fitzsimons, who has been vice-president, was elected to the presidency by acclamation, Mr. Jas. Wilson was advanced

one step to the 1st vice-presidency, and Mr. J. E. Nott was made 2nd vice-president. Short speeches of thanks were given by each new officer. They are all good men for the various positions.

THE SITUATION IN LINSEED OIL.

As was predicted last week in **HARDWARE AND METAL**, linseed oil advanced 2c. a gallon. This week the English market advanced another 3d., and quotations in the United States are also rather firmer, so that it is quite reasonable to expect that the price will not be long in taking another step upwards. Probably, indeed, we shall be able to quote an advance in this issue.

From conversations with leading paint and oil dealers in Toronto we learn that during the past week orders for oil have been rushing in. This is easily explained, in view of the expected rise and the advice given in our columns last week. The Toronto price remains below the Montreal quotations, as the freight rates from Baden to Toronto are less than from Baden to Montreal.

Competition in Toronto is very strong, for if it were not the price would rise very quickly. The Canadian supply has not been exhausted yet and a rise cannot be forced.



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THE TENDENCY OF PRICES.

THE following opinion of a hardware dealer of St. Louis, as given in Stoves and Hardware Reporter, on the probability of a rise in prices of hardware, contains a good deal of argument that applies equally well to the Canadian market:

"All classes of business are now especially interested in the probable course of prices. The conditions of business all over the country have certainly been improving since the crop news became favorable, and as there is a necessity if not a demand for goods in the several branches of hardware it naturally behooves every manufacturer, jobber and dealer to look around and determine if possible what are the underlying causes of the present low prices when accompanied by a reasonably active movement.

"It is commonly said that there is an unduly large production, and that this fact has served to prevent an advance, and will probably so continue. This may be true of the total capacity of the various mills and factories, but I do not believe that it applies to the actual production. I know that in some cases, and especially in heavy goods, the manufacturers will not fill orders at the present market prices. It is also a fact that some of the mills have withdrawn previous quotations and will only name selling figures under special conditions. That is, there is no open market in these goods, but prices will be privately quoted. It is also true that the markets for primary materials are advancing.

"Taking the situation in its entirety, therefore, the claim of overproduction does not seem to me to be well maintained. When orders cannot be filled and open quotations on certain lines are withdrawn, it stands to reason that there cannot be any too great accumulation of stock. It is also a well-known fact that when people want goods and cannot get them their demand for those particular goods is more emphatic than when it is known that they can be readily obtained. Such demand is now in force and increasing, and on the well-known theory that movement makes the market it is not an unfair conclusion that prices will at least develop a tendency towards a higher level.

"I firmly believe that one great cause for the low prices in force of late may be attributed to injudicious cutting. Salesmen of all classes are given too much latitude. They have been allowed to meet lower quotations from competing houses in order to effect a sale, no matter if it be at a ridiculously low figure. In this respect I think that the business of selling has been sadly mismanaged and that a demoralizing effect

has been produced. I also think that this kind of commercial policy is being changed for the better and that there will be less cutting both by the manufacturers and the jobbers. This consideration, with the others I have named, will undoubtedly have its effect toward higher values, and I believe that they will be gradually put in force."

A MOUNTED KITCHEN SANDSTONE.

The Pike Manufacturing Co., Pike Station, N.H., and 151 Chambers street, New York, have introduced a mounted sharpening and scouring stone for table, kitchen, butcher and similar knives, as seen in the accompanying engraving. It consists of a sharp grained sandstone about $8\frac{1}{2} \times 1\frac{1}{2}$ inches in size, mounted in a neat box. It is recommended by the manufacturers as particularly useful in sharpening all knives that require a coarse, quick-cutting edge, and can be used also for scouring sinks and similar surfaces. The box, while making it



more salable, protects the stone from breakage. The article is referred to as peculiarly suited to the house furnishing and wooden ware trades. It is designed to be retailed at 15c.

HOW TO SPOIL A GOOD KNIFE.

"There's a knife I bought in your store awhile ago and the blades have given out," said a countryman in a large hardware store. "What's the matter with it?" asked the clerk, and the customer proceeded to relate how the "temper" had left the blades. He said he used his knife chiefly to cut plug tobacco and apples, and the confession led to a discussion of knives in general, during which the countryman was given the information that the acid in apples and plug tobacco would draw the "temper" out of the best knife blade ever made. "Very few people understand that fact," said the salesman, "but it is a fact just the same. A knife that is used to cut apples and tobacco will give out a great deal sooner than it would had it been used on the hardest wood. A great many people sharpen pencils with a knife and then kick when the blade becomes dull or nicks. The reason is that the lead is gritty, and when it shows its effect on the blade the complaint is made that the steel is either too hard or too soft."—Grand Rapids (Mich.) Herald.

SHOULD A COMPROMISE BE ACCEPTED?

By L. M. N. in Iron Age.

WE are of the opinion that it is not only wise, but just, to accept a compromise from a man who has always maintained a reputation for square dealing and has shown ordinary capacity in running his business.

In a case of this kind we think that the principles of sound and honest trading are best exemplified by agreeing to an honest man's proposal.

There are, however, some very successful business men who make it an inflexible rule never to accept a compromise from any man, no matter how extenuating the circumstances may be.

Every failure should have the closest scrutiny by the creditors, so that the true cause of it may be known, and then the result of this examination should be the basis of their decision.

A CASE IN POINT.

A retailer recently found himself in financial difficulty and called a meeting of his creditors.

At this meeting it was shown that his liabilities were \$7,000, while his assets were, stock \$1,000, book accounts \$1,000, which were considered good, and \$500 owing him, which were counted bad. Here was a man owing \$7,000 with only \$2,000 to pay it. His offer was 20c. on the dollar.

He had been doing business for about ten years. He had started out as doing a cash business and had very little, if any, capital.

His trade was small at the beginning, but as he sold low he soon worked up quite a trade and seemed doing so well that he readily gained all the accommodation he needed.

One of his creditors, shortly before his failure, got a report from a mercantile agency which read something like this: "Aged about 35. He is an active, industrious man of good character and habits and fair ability, who has done an increasing trade and made some money, being estimated now worth a surplus of \$1,500 to \$2,000, all in the business and made since he began. It is said he pays his bills satisfactorily. Credit fair."

On the strength of this report the firm in

question, who had been doubtful of his standing, sold him a large bill of goods, thereby increasing his indebtedness, though before receiving the report they were of the opinion he owed sufficient.

When the above meeting of his creditors was called a few weeks after, they were not a little surprised.

As the other creditors all agreed to accept his offer, this firm agreed to do so also.

They reached this conclusion thus: If they did not accept he might assign, and then everything would be swallowed up and no one would get anything. Or he might go on settling with his other creditors, but he would be angry with this firm who did not accept, and he would carry on business under a relative's name and buy in future from another house.

Thus the probabilities were that he would never be worth anything, and the question resolved itself into the shape whether it was better to take the 20 per cent. and retain his trade in the future, which would be cash, or run the risk of losing all.

So looking at it from a business point it was decided to accept the offer.

UNWISDOM OF COMPROMISING WITHOUT EXAMINATION.

Now, although this is the course usually adopted by creditors in such cases, yet it is open to objection.

In the first place, there was no examination of this man's affairs.

To be sure, the heaviest creditor had looked far enough into them to satisfy himself that the offer was the best that could be done, and the others fell in with his conclusions.

ANALYZING A CASE.

Here was a man, who in ten years, supposing him to have started with little or no capital, had gone behind hand at the rate of \$500 a year. He had not met with any unusual or heavy loss. He had a good reputation locally and the creditors all considered that he was not dishonest.

There must then be a leak somewhere. He had been spending too much on private expenses, or the expenses of the business must have been too large, or his selling profits must have been too small, or all these causes must have been at work.

Now, had his books been carefully examined by some competent accountant the truth of these surmises might have been sustained. But no examination was made, the compromise was paid in cash and he is now running along as before.

RESULT OF ILL-CONSIDERED COMPROMISES.

Now although these creditors may have thought they did the best thing under the circumstances, we are inclined to differ.

What about the men doing business beside this man who failed? They pay 100

Look at the Value.

The shrewdest buyer is not the one who looks at price alone, or who is always in for the lowest price.

He is the one who can discern the advantage of a good article at a fair price over a poor article at a low price.

It's value that counts—especially in paint. No buyer can tell anything of the value of paint from the price per gallon or per pound. It's what can be **accomplished** by the paint **for the money** it costs—that tells.

It's right here—calculated in this manner—that **THE SHERWIN-WILLIAMS PAINTS** prove themselves the best value of any paints made—therefore the cheapest—because they accomplish most.

They cover most, they look best, they last longest—this is true—absolutely true.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
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MONTREAL

cents on the dollar, while he has only paid 20.

Is it fair to the men who manage their business economically, who keep their stock insured and who pay their bills dollar for dollar, for the wholesale firms to accept compromises from such failures in business as here outlined?

PREMIUM ON INCOMPETENCY.

We think not. And as long as they continue to do it, so long will there be dishonest and incompetent and extravagant fellows asking for a compromise.

The acceptance of a compromise in such cases not only puts a premium on incompetency, dishonesty and careless trading, but squeezes the upright and competent trader, who is compelled to compete with men who do not often know or care what their goods cost them and how or when, if ever, they will be paid for. The fact is that wholesale creditors often overlook the conditions dependent upon a failure and without due consideration take whatever they can get and then go right on and sell the man goods again.

SCRUTINIZE FAILURES.

Every failure should be carefully scrutinized by a competent person chosen by the

creditors, and if he finds that there has been incompetence or extravagance either with or without dishonesty, then that man should be put out of business.

DISCOURAGE CARELESS TRADING.

And how? some will ask. By not accepting his compromise and by refusing to sell him again if he persists in carrying on business under another's name.

If this heroic method were adopted by the wholesalers, the loss in the first instance might be more than if the opposite were chosen, yet the benefits accruing to fair and honest trading would more than repay the loss.

ENCOURAGE THOSE WHO PAY IN FULL.

Then the man who pays his bills would be encouraged, and men who have no right to be in business would soon find their proper level.

NEWLY INCORPORATED.

The Pritchard-Andrews Co. of Ottawa, Limited; the Ballard Electric and Machine Co., Limited; the Hastings Silver-Lead Mining Co., Limited; the Hiawatha Gold Mining and Milling Co. of Ontario, Limited; the Paint, Oil and Chemical Co. of Toronto, Limited, and the Great Granite Mining and Development Co. of Ontario, Limited, have all obtained charters this week.

WHERE EFFORT HAS FAILED.

PROGRESS in mechanical achievements has been so marked in recent years that this may almost be described as the age of invention. We do nearly everything by machinery. Distance and time are overcome. We speak, write and practically think by wire. We can look inside of ourselves and others and detect flaws other than moral. The seven-league boots of the fairy books have been materialized in the bicycle. Aerial navigation, while not an accomplished fact, gives every promise of becoming so, and it has been proven that man can live and fight his battles under water. In short, many seeming impossibilities have been realized in fact, and the mechanical and scientific genius of the world is triumphant.

But there is much yet to be done. We have not gone sufficiently forward in our march of progress. We are not satisfied with our triumphs and are crying for other spheres to conquer. That is, some of us are in this position. We are not satisfied with what has been done for us, or with the results we have personally obtained. We want something better, more complete, something more entirely destructive of the perversity of inanimate matter. We do not know that we can accomplish these things for ourselves, but we realize that as others have made a partial success of their efforts they should be able to gratify an enlarged demand and make of themselves the masters of material things, irrespective of natural laws. Here are a few of the things that are yet to be accomplished :

A refrigerator constructed on such thoroughly scientific principles that one filling of ice will last for the entire summer. It is understood that an inventor was working on this problem, but has been bought off by the ice monopolists.

A furnace in which the ashes resulting from combustion can be turned back to fuel, thus solving one phase of the perpetual motion problem. The coal barons would antagonise such a process, and its workings might paralyze a great industry, but what is the opposition of wealth or the needs of labor as compared with the value of science?

A gasoline stove that will burn water. It has been proven by chemists that water can be made to burn. There is no reason, therefore, why its use cannot be extended in the direction indicated. Do they not both come from the same source, namely, the ground? and are they not necessarily alike in their constituent elements?

A machine that will prepare editorial and news copy, set types, read proofs, make up forms, print the paper and lay it before the public without a single error and in such a

way that every one will be pleased and none offended.

It may be said that all of these things are impossible. Not at all! They are distinctly within the limits of human endeavor. Those who say they cannot be accomplished are the manufacturers and others who are responsible for the present incomplete order of things and who do not care to admit that their efforts for pleasing the capricious public have been failures. They certainly have been such if they have not caused ice to resist heat, coal to reproduce itself and water to burn. Everything is possible for science, especially in the opinion of those who are acquainted with science at a distance, and it is a pressing shame that inventive genius has not been permitted to exercise its power in behalf of a suffering humanity. However, the millennium will be here some day and we can all be happy in the thought of its coming.—Stoves and Hardware Reporter.

PERSONAL APPEARANCE.

A great deal of printed matter has been devoted to the arrangement of the store. There is one point about this that seems to have escaped attention and which is of equal importance, says The Stoves and Hardware Reporter. It is that of personal appearance. Many proprietors and not a few clerks are apparently indifferent to the tastes of their customers in this respect. Women are not unknown in stove and hardware stores. In many cases their custom forms the bulk of the business. No woman cares to be waited on by a clerk in his shirt sleeves, or by one whose hands are so black with dirt—as not infrequently happens—that she does not care to have them come in contact with her own. Personal appearance counts for a good deal in business. Dudes are not wanted anywhere, but a store attendant need not spend a cent in making himself presentable, and the proprietor may lose a good many dollars when his employe fails to observe a rule that should be one of the cardinal principles in store management.

PAINTS WERE GOING UP.

On Saturday afternoon fire broke out in the building occupied by the Baylis Manufacturing Co., of Montreal, manufacturers of paint and varnish. The fire threatened to become serious, and the whole of the western division of the fire brigade was called out. The firemen worked hard and succeeded in confining the blaze to one building. This necessitated the use of 16 streams. The salvage corps spread a number of covers and succeeded in saving much property. The loss, although considerable, is fully covered by insurance.

LITTLE THINGS.

In business it is the little things that count. The loss of a small discount on a bill is in itself a little thing, but the sums total of these little losses reach large sums.

The giving of a fraction overweight is a small loss in itself, but the daily transactions of the store are numerous and the little overweight soon makes a big loss.

The loss of a single customer is, perhaps, viewed as a single loss, unimportant, but the influence of the lost customer exerted against the store will cause the loss of other customers.

The failure to deliver an order at the time specified is a little thing, but the customer's plans may have been upset by the delay, and a seed of dissatisfaction sown that may result in the loss of a customer.

The failure to fill an order correctly or the omission of a single article may be a little thing, but the unused article may have been the most needed and an angry customer is the result.

Little losses and little errors should be avoided.—Ex.

CANADA'S GREAT FAIR.

As the time approaches for the opening of the Victorian-Era Exposition and Industrial Fair at Toronto next week, interest in its success throughout the country increases and it is safe to say that the attendance will be greater than ever. The great Diamond Jubilee Procession, and the numerous other incidents connected therewith, will prove a great attraction. All the paintings, uniforms, costumes and state paraphernalia have arrived from England, and every preparation has been made even to the cream-colored horses which are to draw Her Majesty's carriage. Such a grand spectacle and opportunity to see the soldiers of the British Empire has never before been placed before the people of Canada, and should not be missed. Cheap excursions will be run the first week as well as the second, and everything will be complete both weeks of the Fair.

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WIRE - TACKS

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HAMILTON

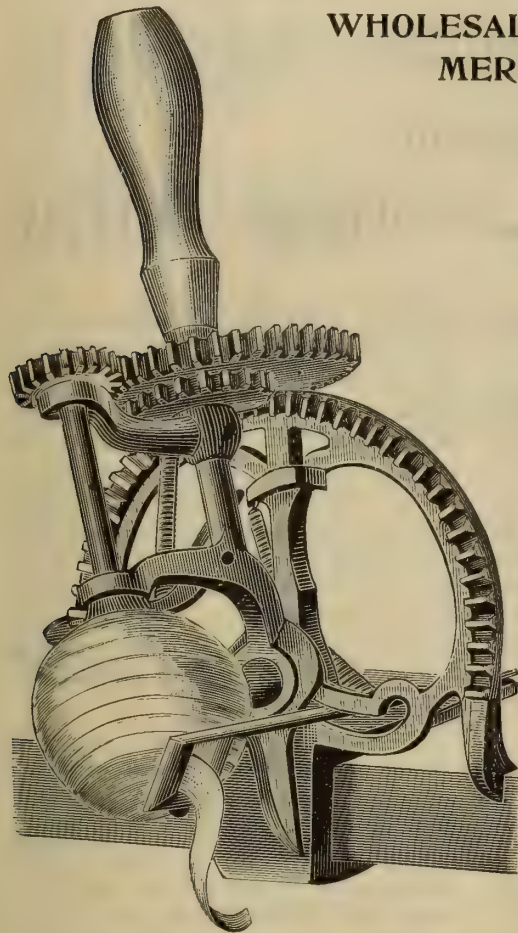
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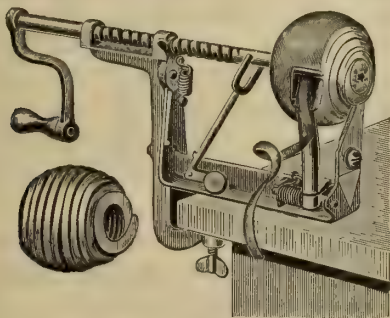
APPLE PARERS

Season
1897



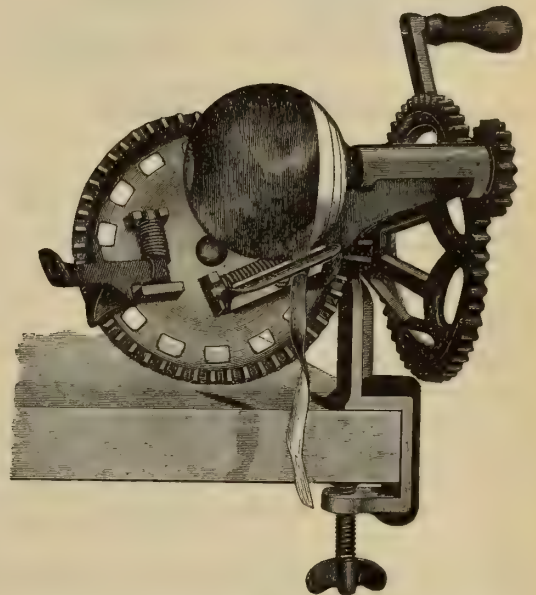
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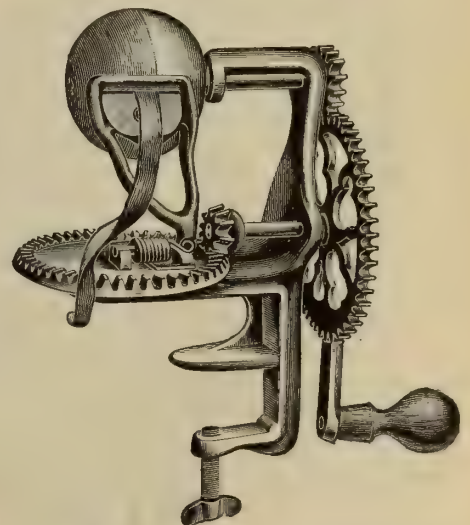
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PARER, CORER AND SLICER
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APPLYING FOR A SITUATION.

MANY young men make great mistakes when looking for situations. In fact, some think that situations are always ready for them, and that their services are in demand; they wait for somebody to come round and invite them to accept one. But such young men should give up this idea, and should realise that to obtain a position they should be on the alert, for valued ones do not long remain vacant. A common mistake is making application by letter. Of course, there are cases where it cannot be avoided, such as answering an advertisement where no name is given, or applying for a situation at a distance. I remember seeing a written application from a young man who heard of an opening in a merchant's office, winding up with the wish that he might be accorded an interview. His letter was carefully and correctly worded and written in a good business style, but he really gave very little information about himself and no references. The one idea which could be gained from his letter was that he was extremely anxious to obtain the situation. The merchant did not take the trouble to write and ask him to call that he might interview him. Had he called upon the business man he would have been accorded the desired interview and could have presented his claims much better.

Shrewd men of affairs are generally very good judges of human nature, and can "size up" a boy or man in a very few moments. There is much in the manner and appearance which attracts or repels, for a man's manners have much to do with his success or failure. A young fellow with an odor of tobacco about him stands a poor chance of acceptance in comparison with one who is lacking in this regard. Another common error is to make the errand known to some person connected with the establishment other than the proprietor. It is only a waste of time and effort so to do, and may spoil all chances. It is better to go direct to the proprietor and tell him why one wishes to see him, and, although he may not just then be in need of anyone, yet, if the person favorably impresses him as a desirable clerk, he may make an opening for him. Business men are always on the lookout for smart young fellows, and when they see one who particularly suits them they become interested, and if no position is then vacant they are apt to take his name and address and keep him in mind when an opportunity does occur.

Then, again, some young men who possess perhaps excellent qualifications are often disappointed in securing a coveted position by their timidity. Modesty is to be commended, but sometimes the two are con-

founded. It is well to be modest, but not well to be afraid to explain all about one's self, why the situation is wanted, the hopes and aims, references, and everything which will be of interest to the prospective employer. It is well to look him squarely in the eye when addressing him, conveying the impression that the applicant means business and is willing to work, and is content to begin with small wages if there is a possibility of advancement. There always is promotion in store for such young men, and it will come about as fast as they are able to bear it.

Business men are not favorably impressed with the applicant who seems too exacting about the wages he is to receive. They prefer to see one who seems determined to succeed, and is willing to accept a menial position and do severe and exacting labor. When they are of this stamp they are soon promoted, for it shows of what stuff they are made. But should one not succeed in obtaining a situation he should not be discouraged, but go about and look for another one. It is best not to wait for the want advertisements, or for some friend to advise one of an opening, but walk right into the merchants' offices and apply; nor is it well to be impudent or too forward, but gentlemanly, courteous, and bold as a lion, and rest assured such a person will not have long to wait in idleness.—Iron Age.



Steel Enamelled Ware

ESTABLISHED 1860.
INCORPORATED 1895.

"Crescent," "Royal," and White.

GUARANTEED not to Chip or Burn.

The THOS. DAVIDSON MFG. CO. Limited

MONTREAL

CHEMICAL LABORATORY McGILL UNIVERSITY

Faculty of Medicine

MONTREAL, October 14, 1895.
THE THOS. DAVIDSON MFG. CO. Limited, MONTREAL.

DEAR SIRS,—I have examined the two samples of Crescent Steel Enamelled Ware, submitted Sept. 24th. I find the Enamel is not acted upon by organic acids nor by dilute alkalis, either when exposed for days at low temperature or even when heated for several hours in contact with these substances. The enamel itself is of such a nature chemically, that it cannot give up anything at all injurious to food materials cooked in contact with it.

I remain, sincerely yours,
(Signed) R. F. RUTTAN.
Prof. Prac. Chemistry.

A. ALLAN, President.
J. O. GRAVEL, Sec. -Treas.

FRS. SCHOLLES, Man. Dir.
J. J. McGILL, Gen. Mgr.

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Specially Adapted for Use in Lumber Mills,
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BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants,

. . . **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

• • • •

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

HERE'S POWER to Warm All Klondike.

OUR FAMOUS . . .

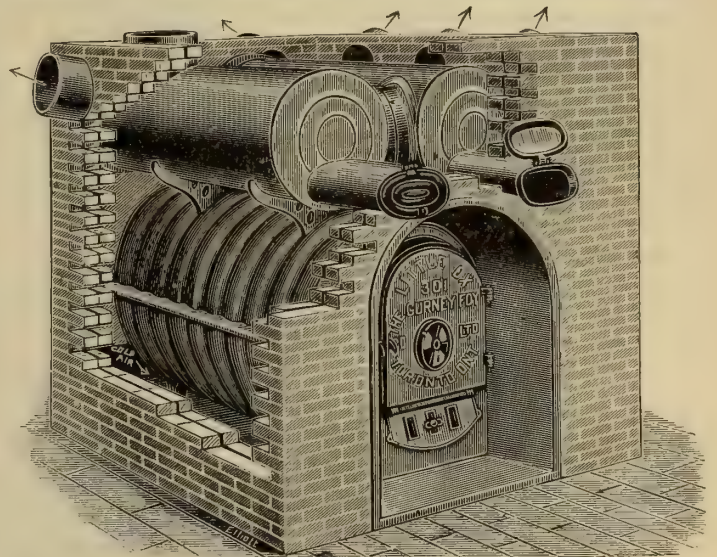
LITTLE OX

WOOD
FURNACES

give magnificent results.

They are made with Double or Triple Return Flue Radiators, and are either **portable or stationary** for brick setting.

A large fire door, a capacity for three feet rough wood, the extra long fire travel, and the ease with which they may be cleaned and regulated, added to their guaranteed capacity up to 30,000 cubic feet, give them their deserved reputation as the **most powerful and satisfactory furnace** of their class on the market. Write us for fuller details and prices.



BRICK SET FURNACE.

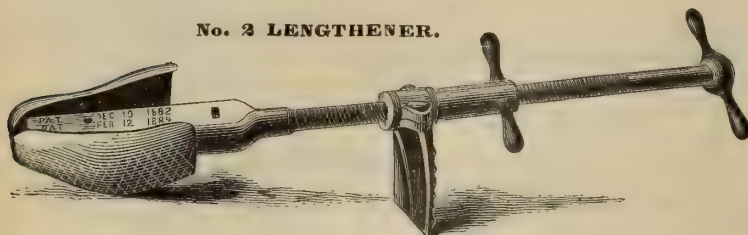
The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.

THE KNAPP & COWLES MFG. CO.

BRIDGEPORT, CONN., U.S.A.

No. 2 LENGTHENER.



Boss Shoe Stretcher.

This Shoe Stretcher is made of the best Malleable Iron and Steel, and will stretch from infants' No. 4 to men's size No. 13; will stretch shoes at any point desired, and also lengthen the shoe.

Prices quoted upon application.

WHY HE ADOPTED THE CASH SYSTEM.

A WESTERN hardware dealer, who appreciates the advantages of the cash system has addressed the following letter to his trade :

We want your trade in the hardware and sporting goods line, and propose to make prices an inducement to buyers. Beginning with the first day of June, 1897, we are going to close our books and mark all goods in the house down to a cash basis, and from that time onward do a strictly cash business. We are convinced beyond a doubt that this is the only fair way to do business, because the people then get the benefit of close prices and do not pay long profits, which must be made in order to offset bad debts in doing a credit business. We have been doing a credit business for the past 16 years, and notwithstanding the fact that we have been careful in selecting and extending a line of credit to the people, we find every now and then that a certain account is worthless. We have fought and reasoned with ourselves for several years why we should make such a radical change in our business, but finally jotted down some of the reasons that brought us to it.

1. We will save the salary of a book-keeper and collector, which amounts to \$500 per year, and by taking advantage of discounts on all bills can save money and sell goods closer.

2. Because we will save in stamps and stationery about \$300 per year.

3. We will always have from \$3,000 to \$5,000 more merchandise in the store in place of having it on the books and in notes, and can therefore serve customers better.

4. Because we will have no bad debts and can therefore afford to sell goods much cheaper.

5. With the above savings we can save customers from 10 to 25 per cent. on every article sold.

6. Because the cash system is the only

system, and quick sales and small profits is the secret of success.

7. Last, but not least, we have been in the credit business for 16 years and are sick of it.

You can readily see that all these expenses, losses and troubles can be avoided by us in doing a cash business, and a saving of a neat per cent. to the customers.

To parties indebted to us we wish to state that we are not going to crowd the collection of their accounts, but will give them a reasonable time to settle, and kindly ask them to continue their patronage, but must insist on cash payment for everything bought from said date. Coupons, which we will issue, will be considered as cash. The fact that goods will be sold close will not allow of their being charged.

Our stock of hardware, stoves, house-furnishing goods, paints, oils and brushes, guns, ammunition and sporting goods will be complete at all times, which will be sold at the lowest possible cash prices.

THE RETAILER'S STOCK.

THE selection of a stock by the retailer is now very much simplified, says Stoves and Hardware Reporter. He should first know what his trade is likely to want. This is an easy matter in a general way, because people keep track of the fashions and when they put up new buildings they want to be in the style. By watching the catalogues and observing what the salesmen tell them, the retailers can inform themselves of all changes and be able to impart their information to their own trade. On this point I want to say that it is a mistake to cater too strongly to the cheap trade. The difference in cost between low grade and superior goods in some lines is small, and I believe that the best is always the cheapest. As an illustration, the difference in cost between the very cheapest and the very best 3½ inch mortise locks, without trimmings, will not exceed six dollars for the ordinary eight or ten-

room house. Yet a poor lock is the most expensive kind of economy. Builders' hardware, like the house itself, is intended to be permanent, and it is a poor and costly policy for the owner to put in cheap goods when those of a substantial character can be bought at a comparatively small advance in cost. Of course, the dealer must select his goods to suit the wants of his trade, but it is my strong belief that he will be doing himself and his customers a profitable service by showing them the advantage of the better class of goods over those that cost less money at first but are almost certain to be expensive in the end. The dealer may argue that in selling cheap goods that will soon wear out he is laying the foundations for a second order, but that kind of treatment is not well received by the customers and they are very likely to go somewhere else for their goods to take the place of those that have not given good service.

MAGNOLIA ATTACKED.

As a result of malicious assault and unlawful trespassing on the premises of the Magnolia Metal Company, Stirling, N. Y., H. G. Tofrey, J. Gray Torrey and two others have been arrested, and a warrant of arrest has been issued against Chas. Taylor. Mr. H. G. Torrey, besides being an assayer, was formerly manager of the Magnolia Metal Company, but last April he severed his connection therewith. He claims that on leaving the employ of the firm he left some valuable tools in the shop, and that the midnight raid of himself, son and friends, and the consequent assault on the night-watchman were for the purpose of recovering these valuables.

WILL SHOT GO UP?

Cable advices report continued firmness in pig lead abroad, and as a result of this disposition traders will not be surprised to see values on shot marked up if the rise continues.

Bicycles..

**CAVALIER
and PELHAM**

At Wholesale Cost Price, to clear out balance of our stock.
Do not delay writing for prices.

Caverhill, Learmont & Co.

HARDWARE AND METAL
MERCHANTS

Montreal

ALWAYS COLD.

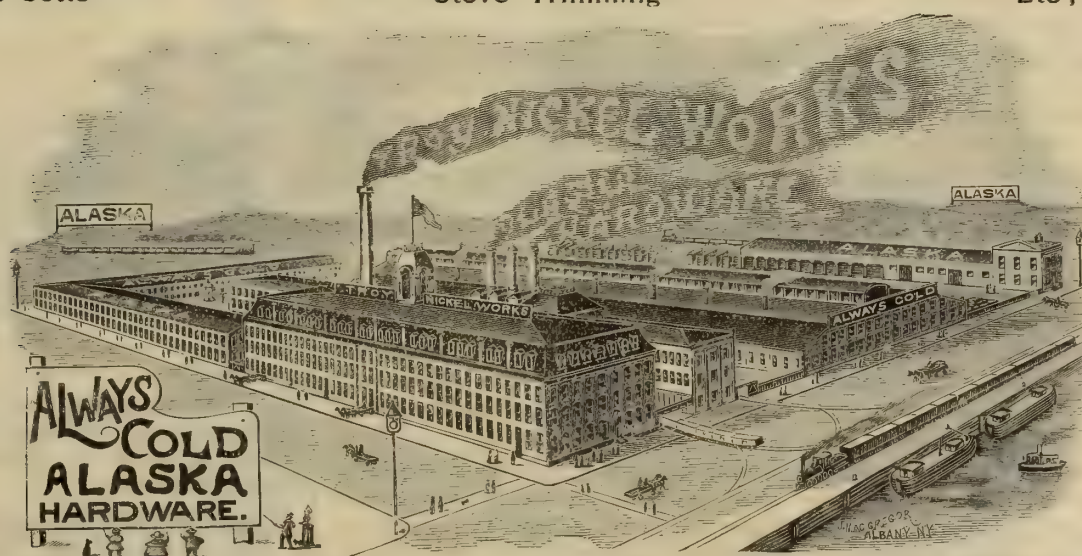
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc, Etc.



If your jobbers don't carry this line
send to us for prices. We will land
the goods at your door. WRITE US
ANYWAY.



TROY NICKEL WORKS, Albany, N.Y.

GAS FOR POWER PURPOSES.

GAS engines driven with ordinary town gas offer the following advantages compared with steam engines: No ground space for a boiler is required, and no chimney; there is no boiler to clean and repair, and no boiler insurance; there are no clinkers and ashes to remove, and no firemen to pay; the gas engine can be stopped or started at will, and there is no loss of fuel during the stand-by hour. Besides all this there is the important fact that there is always a large storage of power to fall back on in the gas holders at the gas works. For intermittent work—such as hoisting, printing, etc., and for moderate powers working constantly, gas engines driven by gas taken from the town mains have such manifest advantages that to a large extent they have superseded steam engines, and will doubtless continue to do so. Almost the only drawback to the use of town gas is its cost, but in some places the day pressure in the mains is too low and gives trouble. It is generally conceded that when town gas costs more than 3s. per 1000 cubic feet, the working cost of an engine indicating more than about 300 horse-power exceeds that of a steam engine of the same power, under the usual conditions of regular working.

For larger powers it is now usual to work a gas generating plant in connection with the engine, or there may be several engines served by one gas plant. In such cases the gas plant is to the gas engine what the boiler is to the steam engine. Approximately it occupies about the same space as a steam boiler of the same horse-power, and the fireman is of the same type in each case. With the gas plant there is no need of a chimney stack, but in towns or where there are adjoining houses, it is desirable to have a small waste-pipe from the generator carried up above the level of the roofs, so that when the fire in the generator is blown up after standing, the gases then formed may be blown off without nuisance. The repairs of a gas plant usually cost much less than the cleaning and repairs of a boiler for the same power. The first engine driven with generator gas was in 1879, and since then the adoption of this system of power has spread so rapidly in all countries that it is now quite impossible to estimate the numbers in use. The general outcome is that engines of good make (indicating 50 horse-power and upwards), driven by generator gas of average quality, consume about 1 lb. of fuel, whereas good steam engines require 2 lbs. to 3 lbs. per indicated horse-power hour. An engine indicating about 120 horse-power has been run on test for five hours with an actual fuel consumption of only $\frac{1}{4}$ lb. per indicated

horse-power. On another occasion, with an engine indicating under 33 horse-power, the gas plant was placed on a weighing machine, so as to obtain a series of actual records of the weight of fuel converted into power, and even on this small scale of working the fuel consumed was only 1.2 lb. per indicated horse power.

It may be accepted that gas engines of 50 indicated horse-power and upwards may be worked, under usual conditions, with 1 lb. fuel per indicated horse-power; but it is right to point out that these results cannot be obtained with all kinds of fuel. For heating furnaces and other such work, generator gas can be made with bituminous coal, but for engine work gas so made carries too much tar and other impurities. To avoid this trouble, the generator gas used for engines is made with anthracite coal or coke. The price of the small anthracite is 6s. to 7s. a ton at the pits in South Wales and near Glasgow, and for the south and in most parts of Scotland the cost of this coal delivered is about the same as that of steam coal. In the midland and northern counties it costs more, and then local coke is used. Lately Dr. Mond has been working a gas plant with bituminous coal, and in his special treatment of the gas it can be used for engine work, but at present he can only work his process continuously, night and day, in a plant capable of serving not less than 2,000 indicated horse-power, so that for ordinary purposes it is not suitable. It is tolerably certain that sooner or later engines will be worked with bituminous coal; but without waiting for that particular result, the fact remained that great economy is already effected by using anthracite or coke.

As to the fuel consumption of steam engines, it is usual to say that non-condensing engines require 2 lb. to 3 lb. coal per indicated horse-power, but it may be well to remember the words of Sir F. Bramwell in his presidential address of 1885 concerning engines working under ordinary practical conditions: "In an investigation instituted last year by the Corporation of Birmingham when considering whether they should approve of a proposal to lay down power-distributing mains throughout their streets, it was found on indicating some six non-condensing steam engines taken indiscriminately from among users of power, and ranging from five nominal horse-power up to thirty nominal horse-power, that the consumption in one instance was as high as 27.5 lbs., while it never fell below 9.6 lbs., and the average of the whole was as much as 18 lbs."—Joseph E. Dawson, before the British Engineering Conference of Civil Engineers.

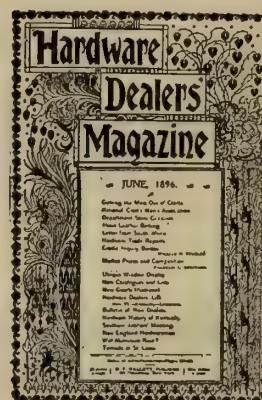


HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.
Norwich, Conn., U. S. A.



ONE DOLLAR A YEAR

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Sample Copy Free

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Publisher
271 Broadway
New York



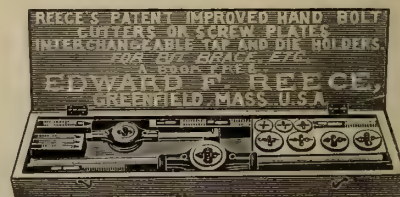
COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.



PERSONS addressing American advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

We are offering **Special Inducements**
in a great many lines of



Hardware and Tinware

and will be pleased to have a call from our numerous friends
during the **Victorian Era Exposition**

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West **TORONTO.**

Indurated Fibreware Round Bottom Fire Pails



It can't be used around the stable.
It would be a failure in milking.
The washerwoman wouldn't take it
as a gift.
It is

"FOR FIRE ONLY"

and can only be used as such.
Note the round bottom.

The E. B. EDDY CO.

Limited

HULL - CANADA

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, August 27, 1897.

HARDWARE.

THERE has been further activity noted in shelf goods of all kinds during the week, and the fact that the cost of raw material is advancing has entered into the consideration of buyers, who, no doubt, desire to anticipate possible advances in the finished material. Plain and barbed wire remain quiet and steady, as last reported, but there has been more enquiry for wire nails, which have symptoms of a rather steadier feeling. Cut nails also receive considerable attention, and the same can be said of horse nails. Screws, bolts, nuts and rivets all maintain their activity, and the tone on these articles is very firm. Carpenters' tools are attracting demand, while cutlery and sporting goods are really brisk. Iron of all kinds also exhibits considerable activity.

BARBED WIRE—Very little doing in barbed wire. We quote: \$2.20 to \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—Business in plain wire continues equally quiet. Discounts are 30 and 5 off, f.o.b. Montreal.

WIRE NAILS—There is a steadier feeling in wire nails, though demand is of the quiet order. No actual change in price is to report, but sellers are more disposed to stick to the regulation figure than before. We quote as before, \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS—There is a moderate quantity moving and prices are steadily held on the basis of \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—A fair trade in small parcels is reported, with discount 50 per cent.

HORSESHOES—Business in these is of a quiet character. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe weight steel shoes, all forward, \$5.50.

SCREWS—Continue in fair enquiry. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Small lots of the latter have been enquired for more freely this week. Discounts are 12½ p.c.

BOLTS—There is a brisk enquiry for these both from first and second hands, and values, though quotably unchanged, have a steadier tendency. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough bolts, 65 per cent. Square nuts, 4¼ c. off the list, and hexagon, 5¼ c.

RIVETS—Thesame remarks apply to rivets. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—Business has continued of fair volume. We quote as follows: Sisal, 7-16 and upwards, 5½ c.; ¾, 6½ c.; 5-16 and ¼, 6½ c., and 3-16, 7½ c.; manilla, 7-16 and upwards, 7c.; ¾, 7½ c.; 5-16 and ¼, 8c., and 3-16, 8½ c.

CHURNS AND CLOTHES WRINGERS—Business in both lines has been very quiet.

HARVEST TOOLS—Business in these is almost over.

SPADES AND SHOVELS—Discounts unchanged and business quiet.

FILES—A fair demand for these is reported. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

CARPENTERS' TOOLS, ETC.—Quite a few lots of these have been taken during the week, also adzes and axes.

BUILDING PAPER—Demand light and

prices unchanged. We quote 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

LEATHER BELTING—Demand for leather belting has been moderately active.

HINGES—Shop and barn door hinges continue in good enquiry. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

WARE—Ware of most kinds is meeting increased enquiry, though individual orders are for small lots.

CUTLERY—There is an increasing demand for cutlery, both table and pocket. Demand is both for prompt and forward shipment.

SLEIGH BELLS—Enquiry for these continues quite brisk.

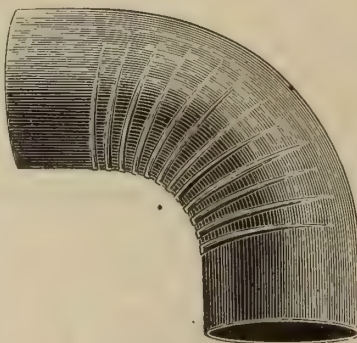
SPORTING GOODS—Activity in sporting goods, especially rifles and ammunition, continues, and orders are of increasing volume.

SHOT—Though no change is to note, an advance would not surprise traders in view of the higher cost of pig lead. We quote: Dropped shot, 16c.; chilled shot, 6½ c., and buckshot, 7c., less 17½ per cent. trade discount.

TRACE CHAIN—Quite a fair number of these have been asked for.

CEMENT—There has been little activity in cement this week, the continuous wet weather completely stopping outside work. We quote: English, \$2 to \$2.10, and Belgian, \$1.90 to \$2 per bbl. ex wharf.

ELBOWS . . .



Do not place your orders for elbows thinking we cannot supply as cheaply as others. We are in a position to sell any style of elbow at the same prices as others, and . . .

We Will Guarantee Prices

3 Styles { 1 Piece, Heavy, 5, 6 and 7 inch.
1 " Light, 6 " 7 "
4 Pieces, Heavy, 5, 6 " 7 "

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

BRILLIANT
FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST

AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosse, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman
Sporting Goods Co.

403 St. Paul St.

MONTREAL

FIREBRICKS—There has been a fair enquiry for these at \$16 to \$21 per 1,000, as to brand.

METALS.

The improving tendency of values across the lines keeps up and is certain to have an influence in stiffening the heavy iron and metal market on spot. So far this week no quotable changes in value have been reported.

PIG IRON—There has been little doing in pig iron, though more enquiry is reported from manufacturers for supplies of Hamilton and Nova Scotia for forward delivery. We quote: No 1 Hamilton, \$15.50 to \$16; No. 2, \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrshire, No. 1, \$17; Eglington, \$17; and Carnbro', \$16.50.

BAR IRON—There is little activity to report in bar. Makers are quoting \$1.30 for car lots, but for smaller quantities the jobbing range is \$1.35 to \$1.40.

BAND IRON—Business inactive and prices unchanged at \$1.65.

HOOP IRON—The same remarks apply to hoop iron, which is quoted on the basis of \$2.25.

SHEET STEEL—Has a firmer tendency, though the basis is not quotably changed from \$2.35.

SHEET IRON—There is a fair enquiry for black sheets and jobbers are in a better position to attend to orders than they were. We quote the base at \$2.25.

GALVANIZED IRON—Enquiry for galvanized plates is improving, but stocks are light and the fact checks business. We quote: "Queen's Head" and "Morewood," \$4.25 to \$4.30.

TINNED IRON—Unchanged at \$5.50 up to 20 gauge, with a fair enquiry.

LEAD PIPE—Not quotably altered, but traders expect a firmer feeling shortly. We quote 7 to 7½c., with 30 and 5 off.

PIG LEAD—The firmness abroad in pig lead continues, and we quote prices firm at \$3.60 to \$3.75.

INGOT TIN—In fair enquiry in a jobbing way at 16 to 16½c.

INGOT COPPER—Ranges from 12 to 12½c., with business light.

SHEET COPPER—As last reported. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Enquiry for iron pipe continues brisk, and prices are firmly held at the advance. We quote: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.80; ½-inch, \$2.25; ¾-inch, \$2.70; 1-inch, \$3.70; 1¼-inch, \$4.80; 1½-inch, \$6.35; 2-inch, \$8.55. Galvanized pipe, ¼-inch, \$2.95; ¾-inch, \$2.95; ½-inch, \$3.80; ¾-inch, \$4.60; 1-inch, \$6.40; 1¼-inch, \$8.80; 1½-inch, \$11.20; 2-inch, \$15.15.

CANADA PLATES — Enquiry has been

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

— MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
" "	Rivet Iron	AVB
" "	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
" "	Rivet Iron	AXB
" "	Stay Bolt Iron	AXB
" "	Hammered Iron	AHB
" "	Charcoal Iron	ACB

Tyre, Sleigh Shoe,

Axe and Rivet STEEL.

Nova Scotia Steel Co.

Limited

NEW GLASCOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

Fishing Tackle.



ALLCOCK'S STAG BRAND

goods are the best. When you buy from us you buy from the largest makers and oldest house in England. Established 1800.



Trade Mark.

ALLCOCK, LAIGHT & WESTWOOD,
73 Bay Street, TORONTO,
and REDDITCH, ENGLAND.

Sole wholesale selling agents for THE DOMINION
HAMMOCK MANUFACTURING CO., Paris, Ont.

quite active for Canada plate for forward shipment, as prices are firmly held. Importers also have been operating for fall importation with considerable freedom. We quote prices firm at \$2.25 to \$2.30.

TIN PLATES—The same remarks apply to tin plate, supplies of which are light, as a general rule. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

COIL CHAIN—Very little doing.

TERNE PLATES—Stocks of these continue light, while demand continues fairly active. Prices are firmly held on the basis of \$6.25.

BOILER PLATE—Without change at \$1.90 to \$2.

SOLDER—Enquiry fair at 12c.

SPELTER—Very firm at \$4.75.

ANTIMONY—Unchanged at 9½ to 10c.

SHEET ZINC—As last reported, under a moderate demand at 5¼ to 5½c.

SCRAP IRON—There have been some fair-sized contracts put through in No. 1 wrought at \$12, while No. 2 is quoted at \$6 to \$7.

PAINTS, OILS, ETC.

Makers report continued quietness, the orders coming in being very light and the greater number of salesmen and travelers are either called off or on holiday. Prices generally are reported firm at the advanced rates quoted last week. Newcastle cables quote all lead products £2 per ton advance over the lowest point, with strong markets. It is therefore quite likely that both white and red lead will be quoted higher before the fall trade is over. In linseed oil the heavy volume of Canadian on the market keeps prices in check, notwithstanding higher English quotations.

WHITE LEAD—As before. We quote: Government standard, \$5.25; No. 1, \$4.87½; No. 2, \$4.50; dry white, \$4.50.

RED LEAD—Scarce and higher. Genuine casks, 4¼c.; kegs, 4½c., and No. 1, ¼c. less.

LIQUID PAINTS—As before.

PARIS GREEN—Unchanged. Drums, 13½c.; packets, 14½c.

LINSEED OIL—With heavy stocks, the nearest quotation is: Raw, 42c.; boiled, 45c.; 5-bbl. lots, 1c. less.

TURPENTINE—Easier, single barrels, 43c.; 5-barrel lots, 42c.

VARNISHES—In fair demand without change in prices.

SEAL OIL—Quiet at 42 to 44c.

COD OIL—Dull, at 31c.

NAVAL STORES—Steady and unchanged. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

The glass market rules firm in its disposition and stocks in jobbers' hands generally in this market are light. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Without change. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

There has been a fair enquiry for heavy chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50.

TRADE NOTES.

Higher prices are predicted in shot, owing to the advance in the cost of pig lead.

Another advance in the price of window glass would not surprise the trade to any extent.

Importers are contracting freely this week for tin, Canada and terne plate for fall importation.

Newcastle cables quote all lead products £2 per ton advance over the lowest point, with strong markets.

Some round contracts for United States wire rods and steel billets have been closed with the local rolling mill men lately.

ONTARIO MARKETS.

TORONTO, Aug. 27, 1897.

HARDWARE.

TRADE in general has been fair, in fact, somewhat better than jobbers expected this week, on account of the rush for harvest tools being over and the Exhibition week drawing nigh. For a few weeks before the Exhibition a great many retailers hold off buying till they have the opportunity of

paying a visit to the city. In plumbers' and steam-fitters' supplies trade is remarkably brisk on country account, while the city demand shows no improvement. Business in the sporting goods line is exceptionally active. Shot has been advanced, and is now held at 15 per cent. instead of 17½, as heretofore. It will also be noticed that barb wire has advanced again slightly, as also lead pipe. The latter is subject to only 30 per cent. discount, instead of 30 and 5 per cent. In iron pipe all quotations have been withdrawn by manufacturers as well as by jobbers; all quotations given now are subject to immediate acceptance only. In fall supplies, from present appearances, trade promises to be equal to that of last year, as representatives are sending in nice orders. Enquiries, too, are coming in freely.

BARB WIRE—As far as trade is concerned there is nothing of special importance to report. Prices have advanced and are now quoted at \$2.25 f.o.b. Toronto, Montreal, London and Hamilton. Terms are as before: 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—There is a slight improvement in trade, but nothing of any startling nature is noted. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—There seems to be a little more business doing in these goods, both in bright ironed and coppered spring. Discount, 30 per cent.

WIRE NAILS—Trade keeps becoming better slowly and prices are virtually the same. When quoting freight, classification must always be consulted. The ruling idea as to base price is \$2.04 Toronto, Hamilton, London, and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—The quantities moving are not quite so large, yet orders are coming in quite freely. Prices are firm. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Business is quite active. Discount, 50 per cent.

HORSESHOES—Trade is better this week. Some large orders have been received. We quote: Iron, \$3.35; steel—No. 0, 1, 2,

Binder Twine.

HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

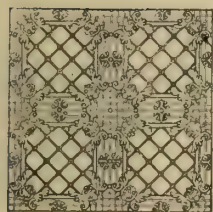
The "Hayes" Patent Metal Lath

Just the
thing for
Pipe Chases



Just the
thing for
Pipe Chases

Used in many of the most important buildings in the Dominion and United States.



**EMBOSSSED
METALLIC
CEILING**



We illustrate herewith three of our designs. You should handle these goods. They are rapidly superseding Lath and Plaster.



The METALLIC ROOFING CO. Limited

WRITE FOR QUOTATIONS.

MANUFACTURERS.

1170 King St. West ... **Toronto.**

\$5.35 ; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton ; f.o.b. London, \$3.40.

SCREWS—Trade is only fair. Orders are numerous but not large. Discounts are : Flat head bright, 87½ and 10 ; round head bright, 80 and 10 ; flat head brass, 82½ and 10 ; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent. ; round head, 20 per cent.

BRASS AND COPPER WIRE—No improvement has been noted. Discounts are 12½ per cent.

BOLTS—Business remains much about the same as it was last week. Discounts are as follows : Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent. ; ditto, ⅜, 70 per cent. ; full square bolts, 70 and 10 per cent. ; Norway carriage bolts, 70 and 10 per cent. ; tire bolts, 70 and 5 per cent. ; machine bolts, 70 per cent. ; coach screws, 80 per cent. ; blank bolts, 60 per cent. ; sleigh shoe bolts, 80 per cent. ; plough bolts, 50 and 10 per cent. ; stove bolts, 70 and 5 per cent. ; tire bolts, 70 per cent. Nuts, ⅜ and larger, 4c. per lb. ; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—Business continues quite active, more particularly in the tinned and coppered varieties. We quote as follows : Carriage, section, wagon box

rivets, etc., (steel) 65 per cent. off the list ; ditto (Norway iron) 60 per cent. ; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent. ; ditto, 3 lbs. and heavier, (steel) 65 per cent. ; ditto, (Norway iron) 60 per cent. ; iron burrs, 55 and 5 per cent. ; copper rivets, 50, 10 and 5 per cent. ; bifurcated, with box, \$1.25.

BRASS BUTTS—Orders still continue to come in freely. Discounts are 17½ per cent.

ROPE—The only kind that is moving with any notable activity is plough line in hemp and cotton. We quote : Sisal, 7-16 in. and larger, 5½c. ; ¾ in., 5½c. ; ¼ and 5-16 in., 6½c. ; 3-16 in., 7½c. Manilla, 7-16 in. and larger, 7½c. ; ¾ in., 7½c. ; ¼ and 5-16 in., 8½c. ; 3-16 in., 8½c. ; deep sea line, 13½c. for water laid, and 14½c. for machine-made ; hemp, 7 to 9c.

CHURNS—Are moving no more freely. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Although the trade is a little better, it is far from being satisfactory. We quote : "New Leader," \$30 per dozen ; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—The trade is drawing to a close. The demand is increasing, however, for corn hooks, corn knives and

hay knives. Discounts are 60 and 10 per cent.

SPADES AND SHOVELS—The demand for standard goods remains steady. The rush is over except in tile and drain tools, which are beginning to go out freely. Discount, 45 and 2½ per cent.

BUILDING PAPER—Business is a little better this week, but not any very large orders are being received. We quote : Plain building, 30c. per roll ; tarred lining, 40c. ; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—Trade is only moderate. There are no special features. We quote : Standard, 55 per cent. ; extra, 40, 10 and 10 per cent. ; agricultural, 65 and 5 per cent.

WARE—Nothing more can be said than that the trade remains steady.

HINGES—A heavy trade has been doing in the jobbing line. We quote as follows : 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35 ; light T and strap, 70 and 10 per cent.

CUTLERY—This is one of the lines that is showing a heavy fall demand. The better lines are moving actively.

SPORTING GOODS—Trade is "splendid." Quite large orders for general lines of guns, rifles and ammunition have been received.

POULTRY NETTING—Quiet and featureless. Discount, 67½ per cent.

GREEN WIRE CLOTH—The demand is dwindling. We quote: \$1.35 per 100 square feet.

GARDEN HOSE—Only a few orders are being filled; the season is about over for it. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—Trade is picking up again considerably. We quote in barrel lots as follows: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

Besides the advances in price of iron pipe and lead pipe, pig iron has risen 50c. a ton. This is due to the heavy demand on the American mills. Business has been quite brisk this week, and shows some improvement.

PIG IRON—Although the heavy demand has caused the American mills to raise their prices, the Hamilton Blast Works have not yet followed suit. There has been considerable difficulty experienced in having orders filled. We quote: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16 for No. 1, and \$15.65 for No. 2; Southern foundry, \$16.25 for No. 1; \$15.75 for No. 2, and \$15.50 for No. 3; Niagara, No. 1, \$15.30; No. 2, \$14.80.

BAR IRON—Trade is falling off. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

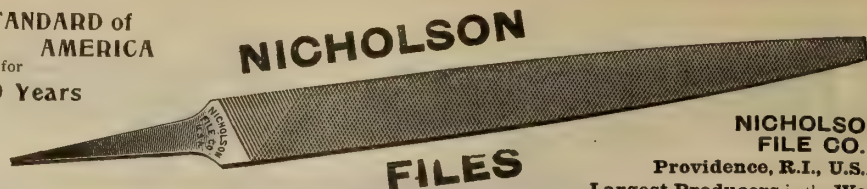
HOOF AND BAND IRON—Although an improvement is noticeable, trade is far from being satisfactory. We quote \$2.20 per 100 lbs.

SHEET STEEL—Business is considerably better this week. It is covering a wider range of gauges and both No. 1 and No. 2 qualities. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—A marked improvement is also noticeable in this line. Orders, too, cover a wider range of gauges and qualities than heretofore. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Business continues on the increase. The demand is slightly in favor of the American varieties. Prices are virtually unchanged. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26,

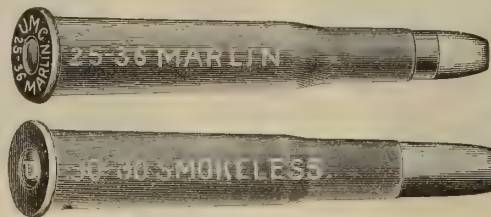
STANDARD of
AMERICA
for
30 Years



NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World

The Marlin Model 1893



in addition to being made for the 32-40 and 38-55 cartridges, is made of special steel to take our high power cartridges, the 25-36 and 30-30 smokeless.

The 25-36 has a 117 grain metal patched bullet with soft lead point, smokeless powder, or a 106 grain metal patched bullet with soft lead point, black powder.

The 30-30 has a 160 grain bullet, either full metal cased or metal patched, with soft lead point, smokeless powder.

If you desire, you can reload the ammunition to suit your purposes, using black powder and a lead bullet with a proper alloy of tin. Cartridges are also ready with light loads for gallery and short range.

Made
in all Styles.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc. Catalog free.

PIKE STATION, N.H.

4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅛ to ¼c. per lb. higher than figures named.

TINNED IRON—Quiet and featureless. We quote as follows: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—Trade is a little better, although no large orders have been recorded. Price of lead pipe has advanced, and the discount is now 30 per cent. off. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 30 per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—Trade is moderate. Discount is 60 and 10 per cent.

PIG LEAD—There has not been a great deal doing, and prices still remain firm. We quote ton lots at 3½c. per lb., and in smaller quantities at 3¾c. per lb.

INGOT TIN—Is moving a little more free-

ly. Prices seem to be well adhered to. Prices are 16¼ to 16½c.

INGOT COPPER—Business remains in about the same condition as it was last week. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER—Quiet. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Trade is not so active. While material is still being sold as quoted, manufacturers and jobbers have withdrawn quotations and all figures are now subject to change without notice. We quote now: Wrought, ¼ to ¾ inch, 1¾c.; ½ inch, \$2.20 to \$2.25; ¾ inch, \$2.65 to \$2.70; 1 inch, \$3.60 to \$3.65; 1¼ inch, \$4.85 to \$4.95; 1½ inch, \$6.20 to \$6.30; 2 inch, \$8.35 to \$8.50; galvanized, discount 60 per cent.

RANGE BOILERS—There are no remarkable features to note this week. We quote as follows: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Enquiries are quite frequent, while few import orders are still

being received, the majority having been placed and a fair proportion delivered. Prices are steady and uniform and are in general about \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—Trade has been quite brisk, and pretty evenly divided between all qualities. We quote as follows: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—There have been no special features to note this week. We quote: $\frac{1}{4}$ in., 4 $\frac{1}{2}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—The demand keeps steady with no improvement. We quote: Imported, 5 $\frac{1}{4}$ c. in ton lots, and 5 $\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Trade is quite brisk now. A fair number of orders are being received for goods for roofing purposes. We quote: IC, \$6.25 to \$6.50; IX, \$8.

SOLDER—As usual solder is quite active at this time of year. We quote: Standard, 10 $\frac{1}{2}$ c.; strictly pure, 11 c.

ANTIMONY—There is no special feature to report. Trade is quiet. We quote: Cookson's, 8 $\frac{3}{4}$ to 9 c.; other makes, 8 $\frac{1}{4}$ to 8 $\frac{1}{2}$ c.

OLD MATERIAL

The iron trade shows no improvement. No shipments of any account were made this week. The prices of rags have not altered. Although Canadian woolen rags are shut out of the United States market, the rags over there have risen in price, and consequently certain grades that formerly were shipped to Canada and placed here at a low price cannot now be brought in and placed at the former low figures. The finer metal trade is fair with prices firm locally and advancing abroad. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42 $\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7 $\frac{3}{4}$ c. per lb; bottoms, 7 $\frac{1}{2}$ c.; heavy copper, 7 $\frac{3}{4}$ to 8 $\frac{1}{4}$ c.; light scrap brass, 4 to 4 $\frac{1}{2}$ c.; heavy yellow scrap brass, 5 $\frac{1}{2}$ c.; heavy red scrap brass, 6 $\frac{3}{4}$ c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to 3 $\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

The demand for glass has been particularly brisk this week, considering, of course, the season of the year. The bulk of the demand is for double diamond, and star is also being called for frequently. Fancy and plate keep up well. Several large orders for the former have been received. The Belgian market shows no change this week, but prices are firm, and some dealers here predict an advance. We quote as follows: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

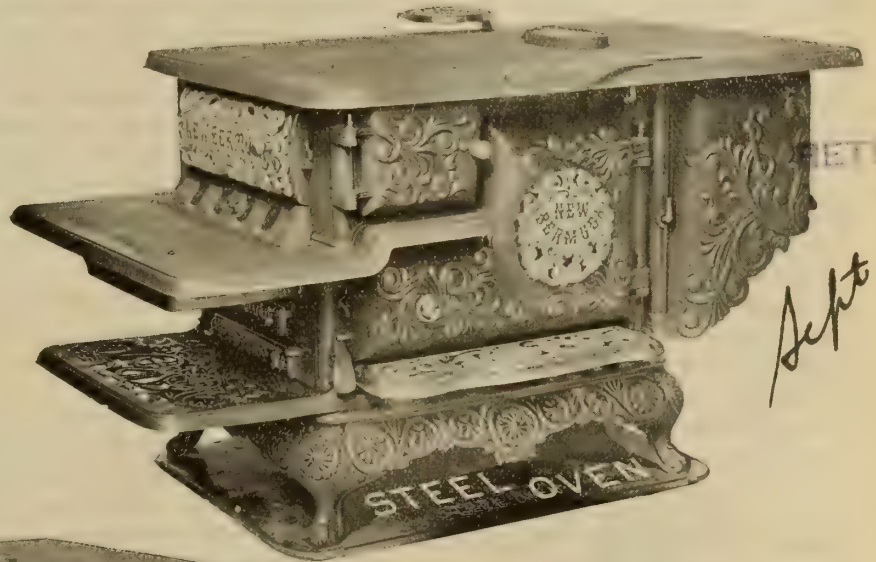
Linseed oil advanced 1c. yesterday. Owing to the expected advance large quantities of linseed oil were moved this week. This may keep up while the low price exists, but there certainly will be a quieter trade this fall. Flax seed is quite high, and dealers are convinced that the price cannot remain at the present quotations. Prices have advanced 3d. in England this week, and United States quotations are firm. Turpentine is rather slow.

New Bermuda

9-26.—Takes 28-inch Wood.

Most Popular
High Grade
Wood Cook
On Market

WITH COLD ROLLED SHEET STEEL OVEN



New Florida

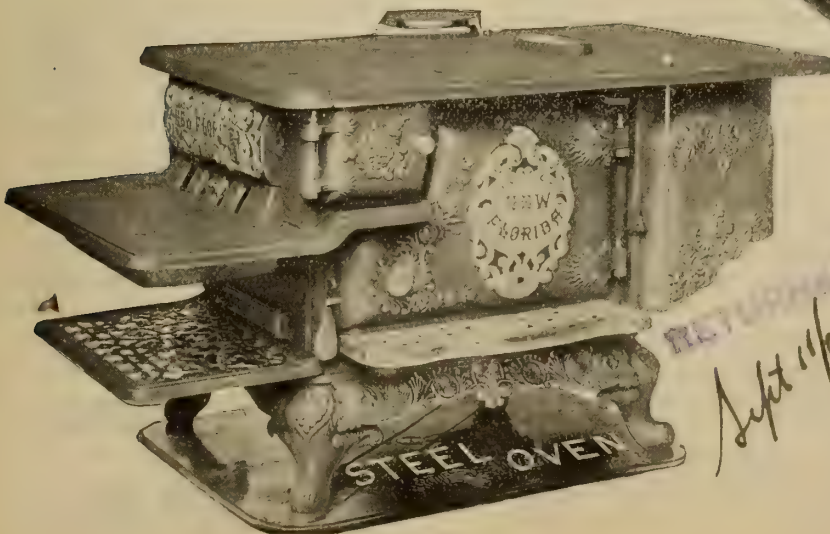
9-24.—Takes 27-inch Wood.

POSSESSES all the features of utility and convenience which have made the "Florida" so popular with both dealers and customers during past seasons

Manufactured by...

The D. MOORE CO. Limited
Hamilton, Canada

Write for
New Supplementary Catalogue.



White lead is moving freely, and there is considerable trade in all dry colors. The scarcity of castor oil is still felt.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.35; No. 1, \$4.97½; No. 2, \$4.60; No. 3, \$4.22½; No. 4, \$3.85; dry white lead in casks, \$4.70.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.25; ditto, No. 1, in casks of 560 lbs., \$4; genuine, in kegs of 100 lbs., \$4.50; ditto, in kegs of 100 lbs., No. 1, \$4.25.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—28c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10c. per lb. and 11c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 44c.; boiled, 1 to 4 barrels, 47c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 44c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—There has been no noticeable improvement during the week. Business continues dull. Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3. Steerhides: 60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Trade is fair and shows no change. We quote; No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 55 to 60c.

WOOL—Prices are unexpectedly firming up, but there is no quotable alteration. Dealers are paying from 19 to 20c.

PETROLEUM, ETC.

Trade is only moderate. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14½c.; carbon, safety, 16½c.; Can-

adian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

Business is much about the same as it was a week ago. There is not much going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Shot has moved up a notch.

Barb wire has advanced 5c.

Pig iron has advanced 50c. a ton.

Lead pipe is now subject to a discount of only 30 per cent.

English quotations on linseed oil advise an advance of 3d.

The manufacturers and jobbers of iron pipe have withdrawn all quotations for the present.

The Massey-Harris Co. Toronto, made a shipment of 526 wheels to Australia on Saturday. The shipment was valued at \$31,600.

MANITOBA MARKETS.

WINNIPEG, Aug. 26, 1897.

A SLIGHT improvement is noticeable in general lines of hardware, and trade, on the whole, is steady. The harvest is being rapidly gathered and the indications all point to a more than average crop, while the rapid rise in wheat is giving a feeling of satisfaction and hope to the whole country. The trade in binders is practically over, though some business will be done in repairs and extras for another month. Many will not harvest, but will work on the Crow's Nest Pass Railway construction.

BARBED WIRE—This market is over for the season, though occasional small lots are being shipped. The price is still \$2.60 per 100 lbs.

NAILS—The demand for nails is small at present, but with the good harvest it is likely that the demand for these and other building materials will increase. Wire nails, \$2.65 base; cut nails, \$2.50 base.

HORSESHOES—There is very little demand. Price remains unchanged at \$4 to \$4.25.

HORSESHOE NAILS—The demand in this line is also slight and prices are unchanged. Pointed and finished oval heads: No. 5, \$7.50 per box; No. 6, \$6.75 per box; No. 8, \$5.75 per box; Nos. 9, 10 and 11, \$5.50 per box. Discount off above list price, 45 per cent.

TIN, IRON AND GALVANIZED IRON IN SHEETS—In all these lines the demand is steady and large. Prices have not varied for weeks.

BAR IRON—Is selling in large quantities, all the shops being busy owing to construction in the west.

ROPE—There is a good steady demand, with no change in price. We quote: Sisal, lb., 6¼ to 6½c. base; manilla, lb., 7¼ to 8c. base; cotton, ¼ to ½ inch and larger, 16c. lb. In binder twine the bulk of the orders have been delivered, but some sorting orders go out daily. The stocks through the country will, no doubt, be sufficient for the harvest.

HARVEST TOOLS—Quite a brisk trade is being done in sorting orders.

PAINTS AND OILS.

Linseed oil has advanced 3c. per gallon. Raw is now selling at 53c. and boiled at 56c. per gallon. For less than barrel lots 5c. additional per gallon is charged. White lead has advanced from \$5.75 to \$6 per 100 lbs.

UNITED STATES MARKETS.

NEW YORK, Aug. 27, 1897.

PIG TIN—More liberal supplies here and slightly easier advices from London served to weaken values a little since trade demand was hardly up to the late average and speculative interest virtually dead. Some business was understood to have been effected at 13.75c. cash, ex dock, but sellers' prices were generally on the basis of 13.85c. f.o.b. for five-ton lots, and some business was put through at or very near those figures.

COPPER—Nothing in the nature of unusual business or demand was reported for the day, but sales agents more than intimated that a larger business is passing than surface appearances might suggest, and it is a well-established fact that prices are held quite firmly all along the line. Lake Superior ingot could have been purchased at little if anything below 11¼c. for either spot or future delivery, while 11½c. was named as a close rate for electrolytic sorts and 10¾ to 11c. for ordinary casting stock.

PIG LEAD—Bids of 3.95c. were made and refused for common domestic, and the

SITUATION VACANT.

WANTED A YOUNG MAN AS BOOKKEEPER one that understands the Hardware Business state salary and reference. Address, Box 12, **HARDWARE AND METAL.** (35)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

"WHAT WE HAVE, WE'LL HOLD."

This utterance, now so often quoted, and which bids fair to become famous, was made in the course of a speech by the Right Honorable Joseph Chamberlain, in reference to Great Britain and her colonial possessions. It will also admit of being used as a motto by us—**"WHAT WE HAVE, WE'LL HOLD."**

What have we? We have the largest and best equipped works in Canada, devoted entirely to the manufacture of horse nails. We have the finest machinery, operated by the most experienced staff of skilled artisans for their production.

We use the best obtainable quality of Swedish (Norway) charcoal iron nail rods exclusively. We make our nails by the old reliable hot forged process; no "cheap John" short and easy, cold drawn wire rod process.

We examine by hand every nail we produce, in order that not an imperfect one may be found in a box bearing our name and the "C" brand. We warrant absolutely, that the nails sold by us will be found perfect and ready for immediate use; we will replace any found otherwise, free of cost, to the purchaser. We have the largest variety of patterns and sizes made in Canada.

We sell our nails at the same prices and terms as other good brands; they should be obtained from any wholesale dealer on the same terms and conditions. Ask your dealer for the "C" brand, made by the Canada Horse Nail Company. Don't accept substitutes.

We want your trade and "we will hold it" if good value will secure it.

CANADA HORSE NAIL COMPANY, MONTREAL

chances were very much against purchases being made at less than 4c. for either prompt or future delivery. Most holders asked 4.02½c. upward at the close. Thus far little business has been effected at above 3.95c. in regular way, but a speculative deal was reported on 'Change involving three carloads at 4.02½c. for October delivery. London cables were firm and quoted £12 16s. 3d. for soft Spanish.

SPELTER—The market remains quiet, but prices are well maintained at about 4.30 to 4.35c. for delivery here or at common point. London cable quoted £17 2s. 6d. for good merchant brands.

ANTIMONY—There is little doing and prices are irregular at 7¼ to 8c., according to brand.

TIN PLATE—A fair business only is taking place, dealers and large consumers have covered their near future wants, and prices remain without change of importance

IRON AND STEEL—There was rather better run of orders for pig iron, mostly of moderate size, but the movement is not above the average for the season, and the business that goes through is almost invariably at previous low prices.

Finished products generally are rather slow and prices are without improvement in any direction.

The British House of Commons has a very paternal style of doing business, and extends its fatherly care over all affairs of the nation, from battle-ships to bicycle riders. Some of the distinguished members of that body were bumped into by bicycle riders in Hyde Park, which is considered derogatory to the dignity of Her Majesty's rulers, and, as a result, the bicycle question has bobbed up in the House and bids fair to assume greater proportions than the noted Casey bicycle bill of Ottawa.

FINE BAR IRON.

IT has been claimed by some importers that the very best grade of bar iron cannot be manufactured in Canada. This is a fallacy, for there is domestic bar turned out that is the equal of any made. **HARDWARE AND METAL** has just received, in this connection, an attractive catalogue from Messrs. Abbott & Co., iron manufacturers. This enterprising concern makes a specialty of its bar iron. They offer the trade a special grade of bar that is the equal of the old English crown bars and which is rapidly taking their place. Messrs. Abbott are also prepared to supply in limited quantities iron equal to Norway or Swedes. The catalogue can be had on application to the offices of the firm, 219 De Lorimier Ave., Montreal.

A NEW BUTTON.

The fact is well known that for a long time buttons and various other articles, for which bone is generally used, have been made from congealed blood purchased at the slaughter houses, the blood being treated with some substance that hardens it to the required consistency. The same articles, it appears, are now made from milk, by a process invented by an Englishman—name and location not mentioned—the material used being ordinary skim milk. The process of turning this liquid into buttons, pool balls, combs, backs of hair brushes and similar articles consists of mixing it with a substance the ingredients of which are known only by the inventor, and then compressing it; at the end of three days the substance is as solid as celluloid, and ready also to be cut and shaped in any way the manufacturer desires. Buttons are among the chief articles into which this peculiar material is fashioned, and they

differ very little in appearance from ordinary bone buttons, and, though of creamy white, can be colored black or red, or any other tint desired, by simply mixing the coloring matter with the milk before the hardening process begins; they are said to possess advantages over those made of bone or celluloid in being less brittle and less liable to chip. For the production of combs the milk substance is remarked as being especially well adapted, as it is smooth and delicate to the touch, and derives from its creamy origin a glossy surface.

IRON OUTPUT.

The output of German blast furnaces in May reached a total of 579,613 metric tons. For the five months ending May 31, the total production was: Foundry iron, 440,442 metric tons; forge iron, 689,602 tons; Bessemer pig, 229,938 tons; Thomas (basic) pig, 1,439,530 tons; total, 2,799,512 tons. This shows a total increase of 203,039 tons, or 7.8 per cent. over the corresponding period last year.

WANTS ONE THOUSAND DOLLARS DAMAGES.

Mr. E. Lecours, of the firm Amiot, Lecours & Lariviere, hardware merchants, of Montreal, has entered an action for \$1,000 damages against the Richelieu and Ontario Navigation Co. Mr. Lecours complains of having been assaulted on board one of the company's boats by employees.

Following is a comparative statement of the Customs receipts at Halifax for the month of July:

	July '96.	July '97.
Customs.....	\$81,866 14	\$49,906 07
Sick marine fund ..	434 58	344 16
Special tax.....	78 00	73 00
Other revenue.....	451 25	985 64
	\$82,829 92	\$51,308 87
Decrease.....		\$31,521 05

Plumber and Steam-Fitter

ALUMINUM BATH TUBS.

PERHAPS in no line of goods handled by the plumbers has there been greater strides made lately than in bath tubs and sinks. Large and important concerns located all over the country have vied with each other in striving to produce the best, so that the average first-class bath tub of to-day, as manufactured by many concerns, is, in artistic beauty, one of the most attractive articles found in the modern residence. The latest improvement in this line is the aluminum bath tub and sink, which has a great many points in its favor over the old-fashioned porcelain variety. A few of the acknowledged benefits in favor of aluminum baths, sinks and sanitary articles are: Their lightness; they are not affected by salts nor acids, to which such articles are liable to be exposed; they can be brought to a very high degree of finish; can be polished on both sides alike so as to resemble silver, and, if properly kept clean and occasionally polished with any good metal polish, will not discolor, corrode nor lose their brilliancy of finish; they are peculiarly adapted to our changeable climate, as aluminum retains heat and consequently does not affect the temperature of the water, or, in other words, it requires but very little hot water to heat a bath to proper temperature, as the aluminum does not absorb the heat of the water. Bath tubs, sinks, etc., made from aluminum are said to be practically indestructible. That they are strictly sanitary, having no seams, crazed or cracked enamel to afford lodging places in which filth or disease germs may accumulate and become a standing nuisance to the health of the users, can be seen at a glance.

AN EVIL.

A persistent evil to the plumbing trade is the substitution of "just as good" material for that which is specified. The injustice to the manufacturer can be seen at a glance, while the injury to the trade is also worth considering. Then, if one will reflect, it becomes clear wherein the plumber substituting likewise stultifies himself. The architect specifies a certain grade of material, a class which the owner naturally supposes will be placed in his house. The master plumber, however, prevails upon the architect in some cases, while in others he

may substitute without said architect's consent, to use material which he claims is "just as good," but does not cost as much. And thus is it done.

It is this class of men who will substitute cheap and defective goods for that specified who assist in demoralizing the trade. Obey the specifications of a contract to the letter, and then if any fault is found it certainly cannot be with the master plumber if his work is otherwise practical.

It has been reported that goods have been ordered by plumbers and the supply houses have endeavored to furnish other goods in their place, simply because the material in the latter cost a little more than the average. The substitution in this case is not confined to the ranks of the plumber, but is extended to the supply house. Wherein can any firm be benefitted by such dealing? It is to the detriment of everyone, including the house owner, and "your sins will find you out."

PLUMBING CONTRACTS.

There have been quite a number of contracts going the rounds just lately, and there are several not let yet.

Messrs. Wright Bros., Montreal, secured the work of plumbing and steam-fitting of two new residences in Westmount, and J. R. Gardner, Montreal, of another.

Purdy, Mansell & Mashinter, Toronto, have a large job in the replumbing of the Inland Revenue office, Toronto street. They have the contract for the steam-heating of a large block of stores and offices for Mr. J. G. King, Fort William, Ont., and another for the plumbing of a residence in Ottawa for Mr. R. Ryan.

Wm. M. Briggs, of Montreal, has the contract for the plumbing, heating and ventilating of a house for James Currie, and another for the plumbing, heating and ventilating of a house for Ald. James Harper.

George Woodburn, of Montreal, has the contract for the plumbing, heating and ventilating of a house for Robert Neville, Westmount, and another for the plumbing, heating and ventilating of a house for A. A. Ayer.

Creed & Son, of Montreal, announce the receipt of contracts for the plumbing, heating and ventilating of a house for Dr. Shaw,

and for the plumbing, heating and ventilating of a house for L. H. Parchard.

E. C. Mount & Co., of Montreal, have secured the contracts for the roofing of two houses for G. Gordon, and another for the roofing of one house for Mrs. Wait.

PLUMBING NOTES.

It is altogether probable that the Hamilton association will be re-organized as soon as the new Executive of the National Association feel at home in their new offices.

The stenographer's report of the convention is at present in Montreal being translated into French. A meeting of the Executive was held last night to arrange for the printing of this report, so that it likely will soon be published.

Joseph Wright, of Toronto, president of the Canadian National Association of Master Plumbers, was in New York lately. He was accompanied by F. H. Herbert, architect, of Toronto. Mr. Wright intended calling on and consulting with President Culloton, of Chicago, in the near future regarding the affiliation of his association with the Grand National of the United States.

SANITATION.

THE following is the report of the Sanitation Committee at this year's convention of the National Master Plumbers' Association, which ought to be of value to the members of the Canadian organization:

MR. PRESIDENT AND GENTLEMEN OF THE CONVENTION,—Until recently the south has been somewhat behind in matters appertaining to scientific sanitation, as it relates to the business of the plumber. Indeed, our state associations are just beginning to put in practical operation a plan for the education of the people and the plumber. The plan is to teach the people to know the value of sanitary plumbing as a health factor through the systematic distribution of proper literature on the subject, and to demonstrate the truth of our claims by practical and attractive showroom exhibits. That we may keep pace with these methods as a trade or profession, and be ready to verify the conclusions of the best authorities in our places of business, when called upon, we are organizing our local associations on

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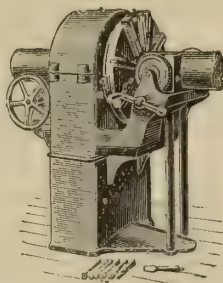
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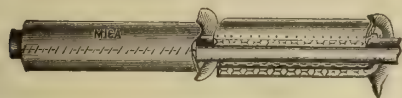
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a general co-operative plan, the basis of which is mutual interest and harmony. The tendency of this system is to create association rooms, comfortably furnished, supplied with charts, blackboards, educational literature, the trade papers on file and bound volumes of back numbers for ready reference. This method will induce a closer personal relationship among our members and will gradually cultivate a confidence and esteem which is necessary to the future success of our business. Members will meet in these rooms to discuss matters of general interest, change ideas, and to keep pace with the progress of sanitary science. It is the pleasure of this committee to report that our plan has already resulted in a number of association rooms of this kind in the southern cities, and we are just in the beginning of our great work. But that these methods will eventually win honor and business success for the plumber is beyond question if faithfully carried out.

We take it for granted that this convention knows of the disastrous trade conditions which did exist south of the Ohio River. That the southern states as a whole presented the most deplorable example of disorganization and trade demoralization of any section of the United States. This condition was largely due to the fact that no state south of Mason and Dixon's line had ever passed a sanitary law, and that but few cities had provided a sanitary system of any kind, and none of these with an examination qualification or challenge for those

who sought or applied for plumbers' license. Until Texas last month gave her citizens such a law, rejected applicants from your northern examining board could have secured license in any city of the south, and entered the competitive field against us, passing current in the public ignorance for legitimate competitors. Under these circumstances you can imagine with what the plumbing business of the south has had to contend; and you can also see why we found it necessary to strike at the very root of the trouble, which is the ignorance of the people concerning these matters. Sanitary law therefore is the objective point of all our work. We believe that sanitary plumbing is the most important department of scientific sanitation. We believe that when we convince the people of this fact by open, dignified and logical argument, sustained by the discoveries of medical science; that the people will demand a law in the interest of health and economy. At least the obstacle of public ignorance will be removed. The practical efficiency of our plan is proven by the recent action of the Texas Legislature. This fight was won on educational lines alone. Texas master plumbers overcame deep-rooted prejudice and every conceivable objection, due to the public ignorance of the points involved, by a systematic and thorough distribution of the educational literature which all of the organized southern states have adopted in common. The entire cost of this contest will not exceed \$50.

The lack of any sort of law or regulation in the southern states has worked many hardships on the plumber in our cities. New Orleans, the home of your committee, is a city of a quarter of a million people, where plumbers are forced to operate on the basis of an unprotected cesspool system. Louisiana has no state law which provides for examination, ordinance and inspection. Anybody can enter the business of plumbing in New Orleans, and any sort of plumbing is acceptable to the people provided it is cheap enough. The only possible way for a citizen of our city to get a safe job of plumbing, is to turn his work over to some good plumber and say, "Go ahead and give me the best work that money can buy." It may not be the experience of the trade elsewhere, but we desire to state that the plumber of New Orleans can take care of all this kind of work without sitting up nights to devise plans which will prevent disease germs from entering the homes of such a patron.

It is to correct this dangerous condition that New Orleans plumbers have organized on a permanent basis of trade harmony and co-operation. The twenty members of our local begin to realize that if the people become acquainted with the dangerous insanitary condition of the city through any other agency, the plumber will receive, however unjustly, the blame of it all. But if we, as an association of plumbers, acquaint the people with these facts, showing the plumber to be the victim and

not the cause of the condition, the people will demand law which protects the plumber and guarantees better health and greater economy to the people. The credit of this educational work will be given to the plumber, who will stand before the people in a new light. His reward will be public confidence and esteem, social dignity and honor, commercial integrity and success.

To promote the plan barely outlined in this report and to receive the benefit which our efforts to gain protective legislation will bring us in cities where there is no ordinance or inspection, as in New Orleans, it is our policy to frame the right sort of city ordinance, and to secure its passage without waiting for the action of our legislatures, which under most favorable circumstances may be delayed two years or more. Your committee as a part of the New Orleans local association, assisted in framing such an ordinance applicable to our cesspool system. We are determined to secure its passage through educational methods, and failing after faithful and patient efforts, we propose to furnish copies to our architect and refuse to figure on work except upon the basis of the rejected ordinance. The time has come when the honest plumber can no longer ignore the scientific fact, that he may be responsible for the life of his fellowmen if he knowingly permits any condition to force him into doing insanitary plumbing. Believing this, we propose to relieve ourselves from the possibility of such a charge in the future by placing the issues before the people and throwing the blame of delayed relief on our law-makers, where it belongs.

In conclusion, your committee ventures to suggest that the national association examine carefully the educational plan of the southern states with a view of its adoption and that the office of national organizer be created by this convention, and a man selected for the office capable of successfully carrying this plan of organization into all the states and territories to the United States.

Your committee also begs leave to emphatically state that it favors the promotion and encouragement of our trade schools in the interest of intelligent and skilled journeyman labor.

We endorse the trade press and commend it to the patronage of the trade at large, believing it to be a powerful factor in this work of education.

'TWOULD BE A SAVING.

A writer in L'Industrie describes a simple process devised by the chemist Yelna, namely, that of using petroleum or mineral oil only for enriching culm and other in

ferior and formerly worthless combustibles, and from this material producing briquettes, the heating power of which is represented to be 30 per cent. higher than that of good coal. In this process a mixture is first prepared consisting of petroleum or bituminous shale tar, oleine and soda, in suitable proportions, by this means the culm, slack, or coal dust being cemented together. Three kinds of briquettes are produced in this way, those known as industrial briquettes for general firing purposes, gas briquettes for the manufacture of illuminating gas, and metallurgical coke. It is well known that brown coal has heretofore been the principal resort for making the briquettes; later, however, experiments with briquettes of solidified petroleum or residuum have been made, as a presumable improvement—these failing to result satisfactorily, at least in the case of boilers, which were unable to withstand the intense heat developed by such fuel.

A GRATIFYING SUCCESS.

The Wanzer lamp and oven is an article that has not been on the market for a great length of time, but it has been thoroughly successful wherever introduced and tried. Testimonials continue to pour in telling the manufacturers what a great amount of

heat and of consequent expense this lamp saves.

There is no chimney in connection with it, and it is non-explosive.

The Wanzer Lamp Manufacturing Co., of Hamilton, are the manufacturers, and they say that special efforts are now being made to render the lamp even more satisfactory than it has been.

LAMPS ABSOLUTELY SAFE AT LAST.

The Ontario Lantern Co., Hamilton, have acquired the Canadian patent for the "Ingram" safety extinguisher, which they intend applying to their line of lamp burners and lanterns.

This extinguisher is simple and durable and cannot get out of order. In extinguishing the light the wick is arrested, making it impossible for the wick to leave the burner and drop into the oil, and ensuring absolute safety from igniting of oil and consequent explosion.

There is no smoke, odor nor crusting of tube. It leaves the wick trimmed in perfect condition for relighting, giving double the light of ordinary burners.

A child can operate the burner in the dark without the slightest danger, and undoubtedly this safety extinguisher will be adopted universally.

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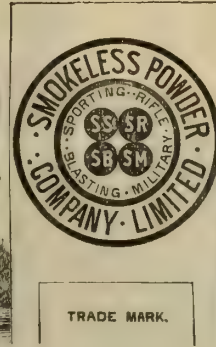
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OUR New Wood Parlor Stove for 1897. Carving of the latest type of Rococo ornamentation, contour unique, and general construction and outline excellent, relieved with attractive Mica Front Door, Lower Ash Door with swinging Front Grate. The Fire Door is large, with convenient ash catch. Adorned with Nickel Medallion, Fender, Door Knobs, and Hinge Pins. The Rods are on the outside, ensuring durability. In every sense a Parlor stove up to date and very moderate in price.

We shall be glad to furnish prices and give the Trade further information upon enquiry.

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THE BRIDGE WAS TESTED.

THE new steel arch bridge built for the Grand Trunk Railway across the Niagara gorge was recently tested officially by the engineers of construction and found to answer expectations in every respect. Two heavy trains, each consisting of eight locomotives and nine loaded gondolas, were run out on the structure from the Canadian end on the double tracks. Their progress was slow, and frequent stops were made to allow the engineers to take levels. When the entire load, consisting of about 2,500 tons, was on the structure, it was found that the deflection at the centre was only 15-16 inch, which result was highly flattering to the work on the bridge. When the last measurement was taken a signal was given that all was well, and all the engines on the bridge sounded their whistles simultaneously with a deafening roar. The rejoicing was taken up by other locomotives in the neighborhood and by the crowds of people on the river banks. In September it is proposed by the Grand Trunk to hold a three days' celebration in honor of the completion of the bridge, and one of the great features of the occasion will be the fireworks display. It is announced that the falls, bridge and rapids will be illuminated with the pyrotechnics and that a balloon will be sent up from which will float fireworks in the form of two flags, one of which will be

the Stars and Stripes, the other the Union Jack, thus recognizing the international connection afforded by the bridge. This is the first steel arch to be constructed across the gorge, which is now spanned by a cantilever, suspension and a steel arch. L. L. Buck was the designer of the arch.

THE FUTURE OF ALUMINUM.

Under the caption "Waiting for Their Inventors," The London Standard recently contained the following interesting remarks on the future of aluminum: The apotheosis of aluminum, so to speak, has been many times chanted, but for all of its great qualities it possesses properties which render its employment useless for many purposes. To begin with, it is by no means cheap, and a process is needed by which it can be produced at a few pence a pound. But its great disadvantage is its softness. If any means can be found for hardening and tempering the metal in the same way that steel can be hardened and tempered, many things which now cannot be done could be accomplished. Flying machines would not only do away with the few motor cars there are about, but would render the breed extinct altogether. The North Pole would have Cook's tourists camping round it, and, in fact, there is hardly a thing which would not be made practicable if the metal could be hardened. And

really, why should it not? It resembles copper in many of its qualities, its softness is about the same, and they both cut "woolly" in the lathe, etc. But copper—pure copper—has been hardened so that it is equal to the finest steel procurable; only it is a lost art which the Aztecs once possessed—we cannot do it now. Still, people have been trying for some time past to arrive at the same results as the Aztecs. When they succeed—as succeed they will—it is not at all impossible that the same process will be equally applicable to aluminum, and then, nous verrons. Still, however cheap aluminum may in the future become, it will never replace timber for many purposes.

CYCLE ROAD RACING IS FURIOUS DRIVING.

The mind of the high constable of the county of York is agitated by the possibility that bicycle road races within the limits of his jurisdiction may be such offences against the public peace as should call for his interference. It seems plain to him that a bicyclist has no more right to scorch along the Kingston road than he has on King street. The bicycle road racers, he says, come properly under the head of furious driving, and pending a favorable construction or a reconstruction of the municipal enactment it should be put down by the strong arm of the law.

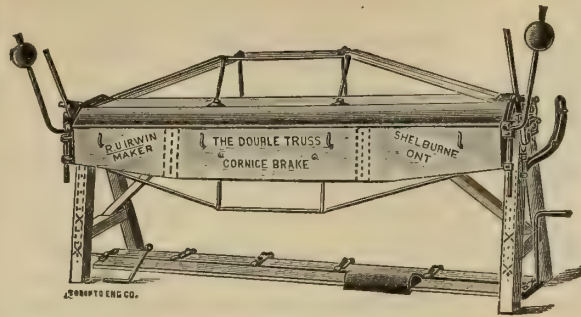
A WAY TO TALK TO A FARMER.

"No," said a hardwareman to the farmer, as he tied up a package of nails in the paper, "as you say, people talk about the low price of what they sell, and don't say a word about the low price of what they buy. Take those nails, now. What do you suppose those nails would cost you ten years ago? Just about six cents a pound, and now you can take the lot of better goods at three cents, and the extra wrapper thrown in. That's not much, you say. Not so much on a little lot of nails, perhaps, but ten cents isn't much on a bushel of potatoes you brought in just now, and that's all the difference in price from ten years ago, and yet you grumble at the low price. It's not the pound of nails that hurts me. Everything in my store has gone down the same way. Your wheat and hay and chickens and butter and eggs bring you substantially the same prices they did ten years ago. You farmers forget that you have things to buy as well as things to sell. Want to buy a plow this year? There's a dandy for \$12. Ten years ago I would have asked \$16 for it. There's \$4 saved to you at one clip. There's a better planter than the one I sold you ten years ago for \$60—a whole lot better. Take it along for \$40. Remember that binder you bought of me ten years ago for \$189? Must be worn out, eh? I'll sell you a fifty per cent. better one to-day and throw off the \$89. You farmers don't know when you are well off."—Chicago Journal of Commerce.

HOW THEY TAKE IT.

This is the view Railway Age takes of our Government's policy in regard to the building of the Crow's Nest railway:

Canadian trade and labor are to have a monopoly in the construction of the 300 miles of road which will form the Crow's Nest extension of the Canadian Pacific Railway. The Dominion Government has put in force the alien labor law in Manitoba, Northwest Territories and British Columbia. Contractors have been prohibited from employing any alien unless he is an immigrant from Europe come to settle in Canada, and Customs officers along the boundary line are ordered to collect full duties on all material that may be brought from the United States by parties intending to work on the road. Perhaps it is natural that the Canadian people should want to keep in the country the \$7,000,000 or so that is to be expended on this road, half of it a direct subsidy from the Government, and Canadian contractors were doubtless more than willing to have competition from the United States excluded. But the principle involved is in marked contrast to that under which the railways of this country have been constructed.



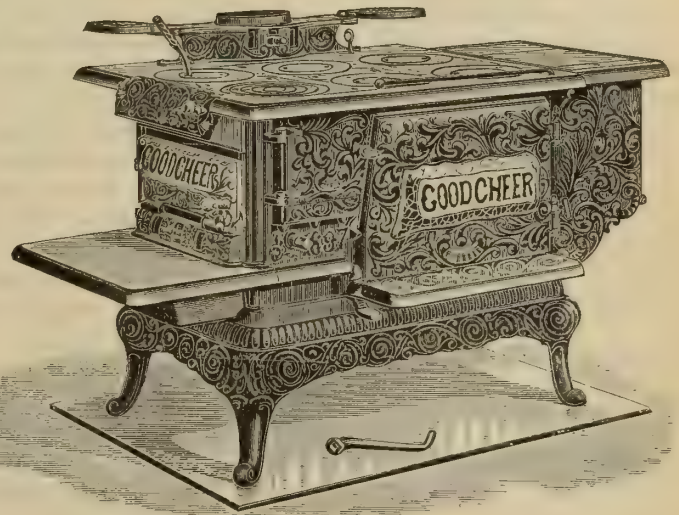
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Bearer for \$12—the handiest made. Send for circular to

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Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



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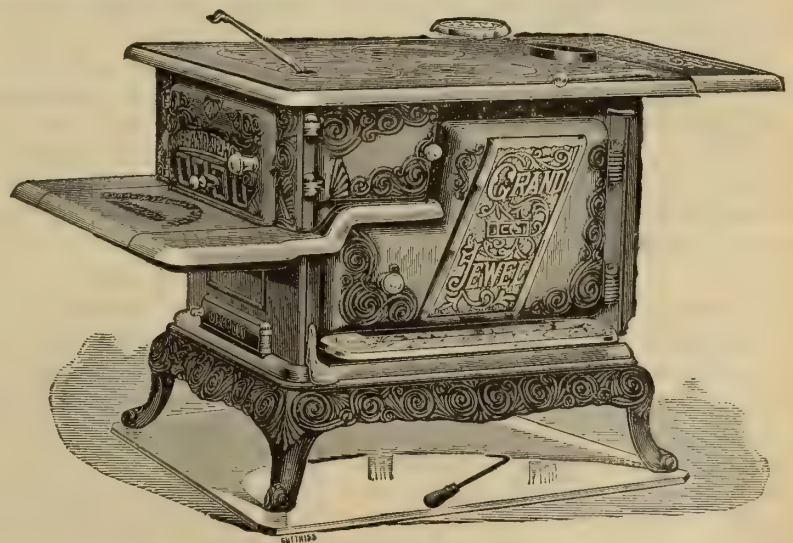
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SHEET STEEL OVEN.



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BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

JOHAN McD. HAINS has been appointed curator of the bicycle business of E. W. Matthews & Co., Montreal.

— Valentine, general merchant, Quebec, has assigned.

Maggie A. Spurr, general merchant, Torbrook, N.S., has assigned.

T. K. Donnelly, lumber merchant, Parrsboro, N.S., has assigned.

C. S. Thomson & Co., general merchants, Ymir, B.C., are reported assigned.

Louis Chenier, lumber jobber, Pembroke, Ont., has assigned to Gedeon Delahaye.

W. R. Hipwell, general merchant, Cambridge, Ont., has assigned to David Haig.

James H. Buckley & Co., general merchants, Guysboro, N.S., have suspended.

H. Girard, general merchant, Lacolle, Que., has assigned to Lamarche & Benoit.

Laing & Meharry, hardware merchants, Port Perry, Ont., are offering to compromise.

John Ahlberg, contractor, etc., Rat Portage, Ont., has assigned to Chas. W. Chadwick.

Timmins Bros. & Co., general merchants, Baie des Peres, Que., have assigned.

P. G. Miller, general merchant, St. Felix de Valois, Que., has assigned to Bilodeau & Renaud.

Didace Bouchard, general merchant, St. Anne des Monts, has compromised at 50c. on the dollar.

Joseph Lapierre, general merchant, St. Antoine, Que., is offering to compromise at 40c. on the dollar.

H. F. McQuire & Co., general merchants, Webbwood, Ont., have compromised at 25c. on the dollar, cash.

The Thomas E. Howard Co., brass goods, Montreal, are preparing a statement. A meeting of creditors is to be called.

James Purvis, builder, etc., Hamilton, has assigned to W. Ambrose, Hamilton. A meeting of creditors was called for the 27th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

Amors Bros., general merchants, Pubnico, N.S., have dissolved.

Shields Bros., general merchant, Lyndhurst, Ont., have dissolved.

Wilson & Paterson, general merchants, Salmon River, B.C., have dissolved. Theo. Paterson continues.

John A. Manley is reported retiring from the firm of Manley, Averill & Co., general merchants, Grand Forks, B.C.

The Charles Stark Co., jewelry and sporting goods, Toronto, have dissolved.

Urgen Beaucage as general partner and George Snelling as special partner for

\$1,000 till Oct. 1, 1898, have formed a partnership in Montreal to deal in hides under the style U. Beaucage.

E. Nadeau & Frere, joiners, Quebec, have dissolved partnership.

Dugas & Legault, carpenters, St. Louis de Mile End, have dissolved.

Hipkins & Blench, blacksmiths, Slocan City, B. C., have dissolved. L. F. Hipkins continues.

A co-partnership has been registered in Yarmouth, N.S., for Allan D. Jost to trade under the style the Whole Wheat Meal Co.

Henri Labrecque and Alfred Mercure have formed a partnership in Montreal to trade as builders, under the style of Labrecque & Mercure.

Eugene Becker and Florenz Cords, as general partners, and Hermann Becker, special partner for \$10,000 to September 1, 1900, have formed a partnership in Montreal to do business as wholesale importers of hardware, under the style Eugene Becker & Co.

SALES MADE AND PENDING.

The assets of J. A. Racette, general merchant, Lake Megantic, Que., are to be sold.

W. Laughton, general merchant, Bothwell, Ont., is advertising his business for sale.

The stock of Moses Goldstein, tinware merchant, Ottawa, was sold at auction on the 27th inst.

The immovables of the general store of J. R. Andrews, Marbleton, Que., are advertised for sale by tender.

The assets of Joseph Lapierre, general merchant, St. Antoine (Vercheres county), were sold on the 20th inst.

The assets of the estate of Allan P. Boag, foundry, Wroxeter, Ont., are advertised to be sold by auction 1st prox.

The wholesale and retail hardware stock of Gravel & Boulard (in liquidation) is advertised for sale by tender.

W. Tallman & Son, manufacturers of brick and tile, Beamsville, Ont., have advertised their real estate, plant, etc., for sale by auction 4th prox.

CHANGES.

Louis Komiensky has opened out in general business in Annapolis, N.S.

R. D. Martin, general merchant, McGregor, Man., has been succeeded by Peter W. Martin.

Frank Layman, general merchant, Kingsville, Ont., is giving up business and going to Merlin.

Skinner Bros., general merchants, West Lorne, Ont., have been succeeded by Duncan McPherson.

Delbridge & Tonkin, blacksmiths, Port Arthur, Ont., have sold out to H. L. Bell.

Cardiff & MacLean, hardware merchants,

Brushes

**Catalogue
for
1897
Now Ready**

MEAKINS & CO. 313 St. Paul Street . . **MONTREAL**
and Meakins & Sons, Hamilton.

PORTLAND CEMENTS

**FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING**

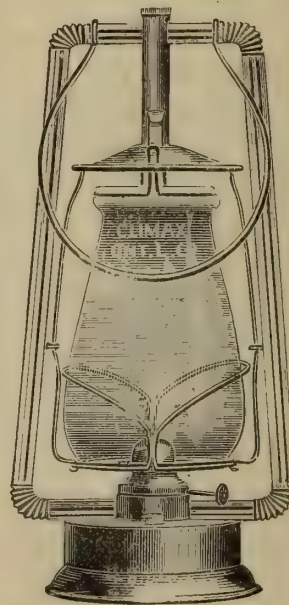
Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

WE MANUFACTURE



Climax Lift
Lanterns
Climax Crank
Lanterns
Climax Tilt
Lanterns
Climax Dash
Reflector
Lanterns
Royal Cold
Blast Lan-
terns. Nos. 1
and 2

Also

Banner Lamp
Burners
Tubular Lan-
tern Burners
Auer Gas
Light Burn-
ers . . .
Angle Lamps
Night Lamps
etc.

THE ONTARIO LANTERN CO.

— Hamilton, Ont. —

WALTER GROSE

Sole Selling Agent - - MONTREAL

Having purchased the Canadian Patent for the "Ingram" Safety Extinguisher for Burners, Lanterns, Oil Stoves, etc., we shall be in a position to supply the same about October 1st. (The best in the world.) Write for particulars.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

Dauphin, Man., have sold their stock to A. J. McPherson, who will continue.

Samuel Ogilvie, blacksmith, Little River, N.S., has been succeeded by Wm. H. Madeau.

W. R. Wilson, stoves and tinware merchant, Waterdown, Ont., has been succeeded by J. F. Vance.

FIRES.

John Clement, general merchant, Pespebiac, Que., has been burnt out.

The Hamilton and Toronto Sewer Pipe Co. have sustained loss by fire at Hamilton.

The stock and machinery of the Baylis Manufacturing Co., Montreal, manufacturers of printing ink and varnish, have been damaged by fire and water. Insured.

George H. Foster, manufacturer of glass, Port Colborne, Ont., has had his factory damaged by an explosion. The lime-burning factory of John Reeb was also damaged by the explosion.

DEATHS.

Charles B. McGill, lumber merchant, Middle Clyde River, N.S., is dead.

Joseph Bessette, of J. & S. Bessette, manufacturers of threshing machines, Ibrville, Que., is dead.

C.W.A. HAS A NUT TO CRACK.

The Executive of the Canadian Wheelmen's Association has a pretty hard question to decide just now in reference to the membership of the association in British Columbia. Some time ago the California cyclists seceded from the League of American Wheelmen and formed themselves into the California League, and since then all the Pacific Coast states have one by one cast in their lot with the new body. The effect of this is that all racing men competing at race meets held under the Coast league rules are immediately suspended by the L.A.W. and are thereby made ineligible to compete in Canada, under an agreement between the C.W.A. and L.A.W., whereby each association recognizes the other's suspensions.

The difficulty now is that British Columbia clubs cannot hold successful meets without competitors from the other side, and while they remain a part of the C.W.A. they cannot allow the Coast league riders to compete. Chairman Beament, of the C.W.A. racing board, received a telegram from Victoria indicating that while the British Columbia clubs wished to continue with the Canadian association, they could not do so unless the Coast league was recognized. As this recognition would mean a breach of the agreement with the L.A.W., it becomes a serious matter for consideration, and a meeting of the C.W.A. Executive will likely be called at once to discuss the situation.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

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ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

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Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—
Toronto Fence and Ornamental Iron Works

Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelities, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

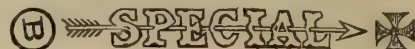
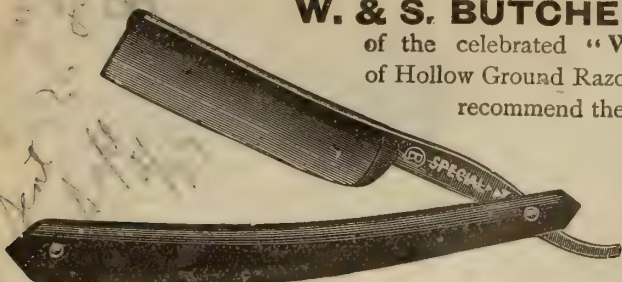
Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
HESPELER, ONT.**

W. & S. BUTCHER, Sheffield, England, Makers for over **ONE HUNDRED YEARS** of the celebrated "**WADE & BUTCHER**" Razors, and the Original Manufacturers of Hollow Ground Razors, can with confidence highly recommend their goods and particularly their

Brand as being the most perfect **Extra Hollow Ground** Razors ever manufactured and especially suited for the use of Barbers and for private use. Genuine Razors are marked with one of the following Corporate Trade marks:

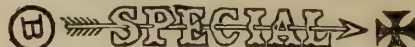


WADE & BUTCHER,
SHEFFIELD, ENGLAND.

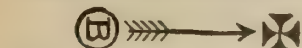
OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS



JAMES HUTTON & CO., Agents, - - **Montreal**

CURRENT MARKET QUOTATIONS.

TORONTO, Aug. 27, 1897.

These prices are for such quantities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 00
Straits

Tin Plates.

Charcoal Plates—Bright.

	Per box.
L.S., equal to Bradley.	\$5 00
I.C., usual sizes	6 25
I.X., "	7 50
J. E. & Co.—	
I.C.	5 00
I.X.	6 25
I.X.X.	7 50
Famous—	
I.C.	5 00
I.X.	6 25
I.X.X.	7 50
Raven & P. D. Grades—	
I.C., usual sizes	3 50
I.X., "	4 25
I.X.X., "	5 00
I.C., special sizes, base.	5 75
D.C., 12 1/2 x 17	3 00
D.X., "	3 75
D.X.X., "	5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

	Base Price
Bessemer Steel—	
I.C., usual sizes	3 00
I.C., special sizes, base.	3 15
20x28.	6 25

Charcoal Plates—Terne.

	Per lb.
Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	6 00
I.X., Terne Tin	8 00
I.X., Orion	8 00

Charcoal Tin Boiler Plates.

	Per lb.
Cookley Grade—	
X.X., 14x56, 50 sheet bxs	0 05 1/2
" 14x60, "	0 06
" 14x65, "	0 07 1/2

Tinned Sheets.

	Per lb.
72x30 up to 24 gauge.	0 06
" 26 "	0 06 1/2
" 28 "	0 07 1/2

Iron and Steel.

	Base Price
Common Bar, per 100 lbs	1 55
Refined "	1 80
Horse Shoe "	1 80
Band "	2 00
Hoop "	2 00
Swedish "	4 00
Sleigh Shoe Steel "	2 50
Tire Steel "	2 50
Machinery "	2 75
Cast Steel, per lb	0 10 1/2
Russian Sheet, per lb	0 10
Tank Plates, 1-5 and thicker.	2 00
Boiler Rivets	4 50

Boiler Tubes.

	Per lb.
1 1/2-inch	0 06 1/2
" 2 "	0 07 1/2
" 2 1/2 "	0 09 1/2
" 3 "	0 11

Steel Boiler Plate.

	Per lb.
1/4 inch	2 45
" 1/2 "	2 35

3/4 inch and thicker..... 2 25

Sheet Iron.

	Per lb.
16 gauge and heavier.....	2 50
18 to 20 gauge.....	2 25
22 to 24 ".....	2 25
26 ".....	2 35
28 ".....	2 45

Canada Plates.

	Per lb.
All dull, 52 sheets.....	2 40
Half polished.....	2 45
All bright.....	2 85

Iron Pipe.

Wrought, 1/4 to 3/8 inch, 1 1/2c.; 1/2 inch, 2 1/2c.; 3/4 inch, 2 3/4c.; 1 inch, 3 5/8c.; 1 1/4 inch, 4 3/8c.; 1 1/2 inch, 6c.; 2 inch, 2 1/2c. Galvanized, 60 per cent. Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

	Per lb.
Queen's Head or equal grades in case lots:	
16 gauge.....	0 03 1/2
18 to 20 gauge.....	0 03 1/2
24 gauge.....	0 03 1/2
26 ".....	0 04
28 ".....	0 04 1/2

Chain.

	Per lb.
Proof Coil, 3-16 in., per 100 lbs	5 50
" 1/4 " " "	6 00
" 5-16 " " "	4 75
" 3/8 " " "	4 00
" 7-16 " " "	3 75
" 1/2 " " "	3 35
" 3/4 " " "	2 25
" 1 " " "	2 85
" 1 1/4 " " "	2 75
Trace, per doz. pairs.....	3 60
German coil, per 100 ft.....	1 65
Jack chain, iron, single, per doz. yards.....	0 13
Jack chain, double, per doz. yards.....	0 15
Jack chain, brass, single, per doz. yards.....	0 20

Copper.

	Per lb.
English B. S., ton lots	0 11 1/2
Lake Superior.....	0 12

Bolt or Bar.

	Per lb.
Cut lengths, round, 1/2 to 3/4 in. round and square	0 20
1 to 2 inches.....	0 18
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.	

Sheet.

	Per lb.
Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15
Untinned, 14 oz., and light, 16 oz., irregular sizes.....	0 15
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.	
Planished and tinned, 14x48 and 14x60	0 25
Braziers. (In sheets.)	
4x6 ft. 25 to 30 lbs. ea., per lb.	0 17
" 35 to 45 "	0 15 1/2
" 50 lb. and above, "	0 15
Boiler and T. K. Pitts.	
Plain Turned, per lb	0 21
Spun, per lb.....	0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list.

Brass.

	Per lb.
Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c. off list.	
neats, hard-rolled, 2x4 ft.....	0 20

Zinc Spelter.

	Per lb.
Foreign, per lb	0 04 1/2
Domestic ".....	0 03 1/2

Zinc Sheet.

	Per lb.
5 cwt. casks.....	0 05 1/2
Part casks.....	0 05 1/2

Lead.

	Per lb.
Imported Pig, per lb.....	0 03 1/2
Domestic, per lb.....	0 02 1/2
Bar, 1 lb.....	0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll.	0 04 1/2
Sheets, 3 to 6 lbs., per sq. ft., by roll.....	0 04
NOTE.—Cut sheets 1/2 cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount. NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7 1/2 cents.	

Solder.

	Per lb.
Bar half-and-half.....	0 11
Standard.....	0 10 1/2
Wire.....	0 17

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

	Per lb.
Cookson's, per lb.....	0 09
Other makes, per lb.....	0 08

Anti-Friction Metal.

	Per lb.
"Beaver" brand.....	\$0 20
"Tandem" A.....	0 19
" B.....	0 16
" C.....	0 10 1/2

White Lead.

	Per cwt.
Pure, Assoc. guarantee, ground in oil,	
25 lb. irons.....	5 35
No. 1 do.....	4 97 1/2
No. 2 do.....	4 60
No. 3 do.....	4 22
No. 4 do.....	3 85
Brandram's B. B. Genuine.....	6 35
" Decorative.....	6 15
" No. 1.....	5 55
" No. 2.....	4 85

f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine..... 6 70
" No..... 6 20

Prepared Paints.

	Per gallon.
(In 1/4, 1/2 and 1 gallon tins.)	
Pure, per gallon.....	1 00
Second qualities, per gallon.....	0 90
Barn (in bbls.).....	0 70
Sherwin-Williams.....	1 20

Colors in Oil.

	Per lb.
(25 lb. tins, Standard Quality.)	
Venetian Red, per lb.....	0 05
Chrome Yellow.....	0 11
Golden Ochre.....	0 06
French.....	0 05
Marine Black.....	0 09
Green.....	0 08
Chrome Imperial Green.....	0 19

Colors, Dry.

	Per lb.
Yellow Ochre (J. C.) bbls. pe	1 35
cwt.....	1 40
Yellow Ochre (J. F. L. S.), bbls.	2 75
per cwt.....	
Yellow Ochre (Royal), per	
cwt.....	1 10
Venetian Red (best), per cwt.	1 80
English Oxides, per cwt.....	3 00
American Oxides, per cwt.....	1 75
Canadian Oxides, per cwt.....	1 75
Burnt Sienna, pure, per lb.....	0 10
Umber.....	0 10
do. aw.....	0 09
Drop Black, pure.....	0 18
Chrome Yellows, pure.....	0 12
Chrome Greens, pure, per lb.	0 03 1/2
Golden Ochre.....	0 03 1/2

	Per lb.
Ultra marine Blue in 28-lb. boxes, per lb.....	0 08
Fire Proof Mineral, per 100 lb.	1 00
Genuine Eng. Litharge, per lb	0 07
Mortar Color, per 100 lb.....	1 25
James' Gen. Red Lead, 100 lb	0 04 1/2
Pure Indian Red, No. 45, lb.	0 08
Whiting, per 100 lb.....	0 50

Paris Green.

	Per lb.
Casks.....	0 13 1/2
50-100 lb. kegs.....	0 14
25-lb. irons.....	0 14 1/2
-lb. Boxes.....	0 15

Sulphate of Copper.

	Per lb.
Casks, for spraying, per lb.....	0 04 1/2
100-lb. cases, do. per lb.....	0 05

Putty.

	Per lb.
Bladder in bbls., per 100.....	1 75
Bulk ".....	1 65
100-lb. cases (tins) per 100.....	2 00

Varnishes.

	per gal.
(In bbls.)	
Carriage, No. 1.....	1 50
Extra do.....	2 50
Body Varnish.....	4 50
Furniture Varnish.....	0 65
Extra do.....	0 90
Demar Varnish.....	1 60
Hard Oil Finish.....	1 40
Orange Shellac Varnish.....	2 00
White Shellac.....	2 20
Rubbing Varnish.....	2 50
Polishing Varnish.....	2 50

Linseed Oil.

	Per gal.
Raw, per gal. net.....	0 41
Boiled, per gal. net.....	0 44
Outside points 2c. more than above figures.	

Turpentine.

	Per gal.
1 to 4 barrels, net.....	0 41
Outside points 2c. more.	

Castor Oil.

	Per gal.
In cases, per lb.....	0 08 1/2
Smal lots.....	0 09

Cod Oil.

	Per gal.
Cod Oil, per gal.....	0 50

Glue.

	Per lb.
(In bbls.)	
Common.....	0 07 1/2
French Medal.....	0 10
Cabinet, sheet.....	0 11
White, extra.....	0 16
Gelatine.....	0 22
Strip.....	0 16
Coopers.....	0 19
At clear.....	0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.	

HARDWARE.

Ammunition.

	Per lb.
Cartridges	
B. B. Caps, Dom., 50 and 5 per cent.	
Rim Fire Pistol, dis. 45 p. c., Amer.	
Rim Fire Cartridges, Dom., 50 and 5 p. c.	
Rim Fire, Military, net list, Amer.	
Central Fire Pistol and Rifle, 18 per cent. Amer.	
Central Fire Cartridges, pistol sizes, Dom., 30 per cent.	
Central Fire Car	

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.	
Best thick white felt wadding, in ½-lb bags.....	1 00	Annex, per doz.....	1 25 1 75	Canadian, dis. 25 per cent.		Nail	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	Mascott, ".....	1 35 1 85			Maydole's, dis. 5 to 10 per cent. Can., dis. 25 to 27½ per cent.	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	Erminie, ".....	1 12 1 20	Dies.		Tack.	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	Blind and Bed Staples.		Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		Magnetic, per doz.....	1 10 1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	sizes, per lb.....	0 7¼ 0 12	Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		Canadian, per lb.....	0 07½ 0 08½
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	Bolts.		Door Springs.		Ball Pean.	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	Carriage, dis., 70 p. c. off new list.		Torrey's Rod, per doz..... (15 p.c.)	2 00	English and Can., per lb.....	0 22 0 25
Thin card wads, in boxes of 1,000 each, 8 gauge.....	0 25	Tire, dis., 70 and 5 per cent.		Coil, per doz.....	0 88 1 60		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	Stove dis., 70 per cent.		English per doz.....	2 00 4 00	HANDLES.	
11 and smaller gauge.....	0 60	Elevator, dis., 35 to 40 per cent				Axe, per doz, net,.....	50 2 00
9 and 10 gauges.....	0 70	Machine, dis., 70 p.c.		Draw Knives.		Store door, per doz.....	1 00 1
7 and 8 gauges.....	0 90	Coach Screws, dis. 80 p.c.		American, dis. 70 and 10 per cent.		Chest, per doz. pairs.....	0 40 2 50
5 and 6 gauges.....	1 10	Boring Machines.		Canadian, dis. 25, 50 and 10 per cent.		Chisel.	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		Complete, with augers, each..	5 00 7 50	Drills.		Firmer, per gross.....	3 00 4 50
11 and smaller gauge.....	1 15	Braces.		Hand and Breast.		Socket Firmer, per gross.....	3 25 8 00
9 and 10 gauges.....	1 40	Barber's.....	6 00 7 75	Millar Falls, per doz.....	16 00 51 50	Socket Framing, per gross.....	3 75 5 00
7 and 8 gauges.....	1 65	Barber's Ratchet.....	10 00 11 00	P. S. & W., dis. 40 per cent.		Fork.	
5 and 6 gauges.....	1 90	Farmers.....	2 00 2 75	DRILL BIT.		C. & B., dis. 45 per cent. rev. list.	
Anvils.		llar's Falls.....	15 50 29 00	Morse, dis. 37½ to 40 per cent.		C. & B., dis. 45 per cent. rev. list.	
Per lb.....	0 10 0 12½	Brackets.		Standard, dis. 50 to 50 and 5 per cent.		Saw.	
Anvil and Vice combined, each.....	4 50	Shelf.		ELBOWS.		American, per doz.....	1 00 1 25
Wilkinson & Co.'s Anvils..lb.	0 09 0 09½	Japanned Canadian, per doz.	0 50 3 40	Stovepipe.		Plane.	
Wilkinson & Co.'s Vices..lb.	0 09½ 0 10	pairs.....	0 85 3 20	Per doz.....	75 1 70	American, per gross.....	3 15 3 75
Augers.		Berlin Bronze Canadian.....	0 85 3 20	FAWCETS.		Hammer and Hatchet.	
Gilmour's, discount 65 p.c. off revised list.		Broilers.		Cork Lined, per doz.....	0 30 0 35	Canadian, 45 per cent.	
Hollow Stearn's, per dozen.....	13 00 20 00	Light, dis., 65 to 67½ per cent.		Wine, per doz.....	1 30 3 25	Cross-Cut Saw.	
Adjustable Stearn's, each.....	5 50 6 50	Reversible, dis., 65 to 67½ per cent.		Star, ".....	2 80 3 90	Canadian, per pair.....	0 15 0 0
Post-hole, Vaughan's, each.....	1 35 1 60	Vegetable, per doz., dis. 37½ per cent.		Fenn's Corkstops, No. 2, per dozen.....	1 70	HANGERS.	
Excelsior, Jennings', discount 50 per cent.		Henis, No. 8, ".....	6 00	Petroleum, per doz.....	4 50 6 50	Door, 4 and 5 inch, per pair..	0 40
Awls.		Henis, No. 9, ".....	7 00	FILES AND RASPS.		Lanes, 50 to 50 and 5 per cent.	
Sewing, per gross.....	0 65 1 59	Queen City.....	7 50 10 00	Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		HATCHETS.	
Pegging, ".....	0 65 1 25	Butchers' Cleavers.		Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		Canadian, dis. 40 to 42½ per cent	
Brad, ".....	0 85 1 60	From 8 to ch, per doz.....	4 23	Black Diamond, 50 and 10 per cent. to 50 10, 5.		HINGES.	
" handled, per gross.....	3 60 30	Butts.		Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		Blind, Parker's, dis. 60 and 10 to 65 per cent.	
Saddler's, per gross.....	0 45 1 60	Brass.		Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		" Shepard's Noiseless, dis. 60 per cent.	
Awl Hafts.		Wrought Brass, dis., 17½ p.c. revised list.		Heller's Horse Rasps, 50 per cent.		" Buffalo, dis. 60 to 70 p.c.	
Patent Peg, oss.....	7 25 8 00	Cast Iron.		Jowitt's, English list, 25 to 27½ per cent.		Light T and strap, 70 and 10 p.c.	
" Sewing, per gross.. }		Loose Pin, dis. 70 per cent.		American, 60 to 60 and 5 per cent.		Heavy, per lb.....	0 03½ 0 04½
Awl and Tool Sets.		Wrought Steel.		Great Western, 60 and 10 per cent.		Screw hook and hinge—	
Millar's Falls, per doz.....	2 80 3 30	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		FLUTING MACHINES.		6 to 12 in., per 100 lbs.....	3 15
AXES.		Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		Each.....	0 60 2 00	14 in. up, per 100 lbs.....	2 35
Splitting Axes.....	5 25 5 50	Berlin Bronzed, dis. 70, 70 and 5 per cent.		FORKS.		Per doz. set.	
Chopping Axes.....	7 25 7 50	Gen. Bronzed, per pair.....	0 40 0 65	Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		Gate, Clark's.....	1 13 1 80
Black Prince.....	7 25 7 50	Can Openers.		FREEZERS		" Shepard's, dis. 50 to 60 per cent.	1 50 2 20
Forest Clipper.....	8 50 9 00	Acme, per gross.....	9 00 10 00	Ice Cream.		Spring.....	1 00 3 50
Lance.....	8 50 9 00	Sardine Scissors, per doz.....	3 75 4 50	Gem, from \$1.25 to \$7 net.		" Shepard's Samson.....	1 20
Manna.....	8 00 8 25	Card.		White Mountain, dis. 50 p.c.		HOES.	
Maple Leaf.....	9 50 10 00	Horse, per do.....	0 60 1 00	Arctic, dis. 50 p.c.		Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list	
Hand Made.....	7 50 7 75	Carpet Stretchers.		FRUIT PRESSES.		Planter, per doz.....	4 00 4 50
Climax.....	8 00 8 25	American, per doz.....	1 00 50	Henis', per doz.....	3 25 3 50	HOOKS.	
Phantom.....	8 25 8 50	Bullards, per doz.....	6 50	Enterprise, dis. 10 per cent.		Cast Iron.	
Axle Grease.		Carpet Sweepers.		Shepard's Queen City, dis. 15 per cent.		Bird Cage, per doz.....	0 50 1 10
Per gross.....	6 00 13 00	Bissell, per doz.....	22 50	FRY PANS.		Clothes Line, per doz.....	0 27 0 63
Bath Tubs.		World, ".....	21 75	Acme, dis. 65 to 67½ per cent.		Harness, per doz.....	0 72 0 88
Zinc, discount.....	3 90 4 0	Daisy, ".....	24 00	GAUGES.		Hat and Coat, per gross.....	1 00 3 00
Copper, discount, 40 and 10 p.c. off revised list		Star.....	18 00	Marking, Mortise, Etc.		Chandelier, per doz.....	0 50 1 00
Steel clad, 20 per cent. discount.		Crown Jewel, per doz.....	29 00	Stanley's, dis. 50 to 55 per cent.		Wrought Iron.	
Boxing extra		Grand Rapids, ".....	24 00 33 00	Winn's, Nos. 26 to 33, each....	1 65 2 40	Wrought Hooks and Staples, Can., dis. 47½ per cent.	
Bells.		Cartridges.		GLASS.		Wire.	
Hand.		(See Ammunition.)		Window.		Hat and coat, dis. 60 to 60 and 10 p.c.	
Brass, 60 per cent.		Castors.		Box Price.		Belt, per 1,000.....	0 60 2 70
Nickel, 55 per cent.		Bed new list, dis. 55 to 57½ per cent.		GRINDSTONE FIXTURES		crew, bright, Eng., dis. 60 per cent.	
Door.		Plate, dis. 52½ to 57½ per cent.		Star.		HORSE NAILS.	
Gon.....	5 50 8	Cattle Leaders.		Per 50 ft.		Canadian, dis. 50 p.c.	
" Sargent's.....	5 50 8	Nos. 31 and 32, per gross.....	8 50 9 50	Per 100 ft.		Canada Horse Nail Co.'s "C"	
" Peterboro', discount 50 per cent.		Cement.		Per 100 ft.		brand f.o.b. Montreal,	50 p.c.
Cow.		Canadian, Portland.....	2 50	GLUE POTS.		HORSE SHOES.	
American make, discount 66½ per cent.		English.....	2 75	Tinned, each.....	0 30	F.o.b. Toronto and Hamilton	3 35
Canadian, discount 45 and 50 per cent.		Belgium.....	2 50	Enamelled each.....	0 55	Steel, ".....	4 85 5
Farm.		Canadian hydraulic.....	1 10	Star.		F.o.b. Montreal 10c. less, and London more than above.	
American, each.....	1 25 3 00	Figures are for carload lots.		Double Diamond.		ICE PICKS.	
House.		Chalk.		Size		Star per doz.....	3 00 3 25
American, per lb.....	0 35 0 40	Carpenters' Colored, per gross.....	0 45 0 75	Under 25.....	1 30 2 50 3 50	KETTLES.	
Bellows.		White lump, per cwt.....	0 60 0 65	26 to 40.....	1 40 2 70 4 00	Brass spun, 7½ p.c. dis. off new list.	
Hand, per doz.....	3 35 4 75	Red.....	0 05 0 06	41 to 50.....	3 00 4 50	Copper, per lb.....	0 30 35
Moulders', per doz.....	7 50 10 00	Crayon, per gross.....	0 14 0 18	51 to 60.....	3 30 5 00	American, 60 and 10 to 65 and 5 p.c.	
Blacksmiths', discount 60 per cent.		Chisels.		61 to 70.....	3 60 5 50	KEYS.	
Belting.		Socket, Framing and Firmer.		71 to 80.....	4 00 6 25	Lock, Can., dis. 50 p.c.	
Extra, 40 and 10 per cent.		American, dis. 75 to 77½ per cent.		81 to 85.....	4 50 7 25	Cabinet, trunk, and padlock,	
No. 1, leather, discount 60 per cent.		Canadian, dis. 50 and 10 per cent.		86 to 90.....	8 25	Am. per gross.....	1 60
Standard, 55 per cent.		Tanged firmer, per doz.....	0 85 4 00	91 to 95.....	9 25	KNOBS.	
Agricultural, 65 and 5 p.c.		Churns.		96 to 100.....	10 75	Door, japanned and N.P., pe	
Bench Stops.		Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		101 to 105.....	12 25	doz.....	0 65 3 00
Per doz.....	5 00 6 00	Steel, net.....	3 00	106 to 110.....	14 25	Bronze, Berlin, per doz.....	2 75 3 25
Bits.		Clamps.		GLUE POTS.		Bronze Gen., ".....	6 00 9 00
Auger.		Judds', dis. 20 per cent.		Tinned, each.....	0 30	Sava, ".....	8 75 10 00
Gilmour's, discount 65 and 5 per cent.		stearns, per doz.....	3 00 10 00	Enamelled each.....	0 55	Shutter, porcelain, F. & L.	
Excelsior, discount 60 per cent.		Clips.		GRINDSTONE FIXTURES		screw, per gross.....	1 30 4 00
rockford Common, 65 to 65 and 5 per cent.		Axle dis. 65 per cent.		P. S. & W., per doz.....	3 30 4 00		
" Perfection, 50 and 10 per cent.		Coffee Mills.					
Jennings' Gen., net list to 5 p.c. discount.		Box.....	3 60 13 00				
Car.		Side.....	3 60 4 00				
Gilmour's, 47½ to 50 per cent.		Enterprise, No. 0.....	1 35				
Expansive.		" No. 2.....	70				
Clark's, per cent.		Compasses, Dividers, Etc.					
Excelsior, 10 per cent.		American, dis. 62½ to 65 per cent					
Gimlet.							
Clark's, per doz.....	0 65 0 90						
Diamond, Shell, per doz.....	1 00 1 50						
Nail and Spike per gross.....	2 25 5 20						

KNIVES.		Wood, fancy Canadian or American, 37½ to 40 per cent.		SCALES.		Leather carpet tacks 65	
Clausen, bread, cake, and paring knives, \$7.00 doz. sets net, to 10 per cent.		Bailey's (Stan. E. & L. Co.), 50 per cent.		Gurney Scales, 50 p.c.		Trunk nails, black and tinned 70	
Christie, \$7.00 net.		Miscellaneous, dis. 25 to 27½ per cent.		B. S. & M. Scales, 50 p.c.		Clout nails 66½	
Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.		Bailey's Victor, 25 per cent.		Champion 60 per cent		Cigar box nails 45	
Lightning, per doz. 6 50 8 40		PLANE IRONS.		SCRAPERS.		Lining nails in papers 15	
Heath's, 52½ p.c.		English, per doz. 2 00 5		Box, per doz. 2 10 4 50		" " solid heads, in bulk 60	
LADLES.		PLIERS AND NIPPERS.		Boot, " " 0 40 3		Saddle nails in papers 10	
Melting, per doz. 1 70 4 50		Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.		SCREENS.		" " in bulk 15	
LEMON SQUEEZERS.		Button's Imitation, per doz. 5 00 9 00		Window, patent, per doz. 2 20 4 50		Tinned capped trunk nails 15	
Porcelain lined, per doz. 2 20 5 60		German, per doz. 0 60 2 60		Door, per doz. 7 10		Double pointed tacks, discount 90 and 25 p.c.	
Galvanized, " " 1 87 3 85		PLUMBS AND LEVELS.		SCREW DRIVERS.		TAPE LINES.	
King, wood, " " 2 75 2 90		R. & L. Co., dis. 70 and 5 p.c.		Sargent's per doz. 0 65 4 00		English, ass skin, per doz. 2 75 5 00	
" glass, " " 4 00 4 50		POPPERS.		SCREWS.		English, Patent Leather 5 50 9 75	
A glass 1 20 1 30		Corn, square, per doz. 1 35 2 00		Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.		Chesterman's, each 0 90 2 85	
LINES.		PRUNING SHEARS.		Wood, R. H., " dis. 80 and 10 p.c.		" steel, each 0 80 8 00	
Fish, per gross 1 05 2 50		Per doz 4 00 5 50		" F. H., brass, dis. 82½ and 10 p.c.		THERMOMETERS.	
Chalk, " " 1 90 7 40		PULLEYS.		" R. H., " dis. 75 and 10 p.c.		Tin case and dairy, dis. 75 to 75 and 10 p. c.	
LOCKS.		Hothouse, per doz. 0 55 1 00		Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.		Asbestos, filled, per doz., 35 to 40 p. c.	
Canadian, dis. 50 p.c.		Axle 0 22 0 33		Bench, wood, per doz. 3 25 4 00		TIES.	
Russell & Erwin, per doz. 1 75 7 50		Screw 0 27 1 00		" iron, " 4 25 5 75		Cow, per doz 1 25 2 00	
Cabinet, " "		Awning 0 35 2 50		SCYTHES.		TINNERS' TOOLS.	
Eagle, dis. 30 p.c.		PUMPS.		Discount, 60 and 10 p.c. revised list.		P. S. & W., 10 p. c.	
Padlock, " " 0 50 6 00		Rumsey or Canadian cistern, 60 p.c.		SCYTHE SNATHS.		Canadian, 35 to 37½ per cent.	
Scandinavian, " " 1 00 2 40		Pitcher spout, 70 to 70 and 5 p.c.		Canadian, dis. 45 to 50 p.c.		TINWARE.	
Eagle, dis. 15 to 17½ p.c.		Canadian cistern, 60 p.c.		SHEARS		Stamped, dis., Assn. list, 80 per cent	
MACHINE SCREWS.		Canadian pitcher spout, \$1.25 to \$3.		B. & W., japanned, dis. 75 p.c.		Japanned, prices on application	
Iron and Brass.		PUNCHES.		E. & W., N.P., dis. 65 p.c.		Pieced, prices on application.	
Flat head, discount 25 p.c.		Saddlers, per doz. 1 00 1 85		Seymour's, dis. 60 p.c.		CALKS (Steel)	
Round head, discount 20 p.c.		Conductors, " " 9 00 15 00		Etna, dis. 75 to 75 and 10 p.c.		Toe calks, per M. net \$3 85	
MAGNOLIA METAL, ETC.		Tinner's solid, per set. 0 00 0 72		Heinisch, dis. 60 p.c.		Heel calks, " " 4 10	
Magnolia Anti-Friction Metal, per lb. 25		" hollow, per inch. 0 00 1 00		Bristol, japanned, 80 p.c.		Discounts, for 10 boxes at oneshipment 10 per cent.	
No Name Metal 18		PUTTY.		" N.P., dis. 70 p.c.		TRANSOM LIFTERS.	
Mystic Metal 08		Bladder, per lb 1 75 017½		Clausen, full nickel, 60 p.c.		Payson's, per doz 2 60	
F. O. B. New York or Chicago.		Tins, lbs. 2 50 2 75		" japanned handles, 67½ p.c. off.		TRAPS. (Steel.)	
MALETS.		RAIL.		Seymour or Heinisch tailor shears, 15 p.c.		Game, Newhouse, dis. 40 p. c.	
Tinsmiths', per doz. 1 25 1 50		Sliding door, " " 0 03½ 0 03½		SHEAVES.		Game, H. & N., P. S. & W., 65 p.c.	
Carpenters', hickory, per doz. 1 25 3 75		Lanes, " " 0 02½ 0 02½		Sliding door, per set. 0 77 1 40		Game, steel, 72½ p.c.	
Lignum Vitae, per doz. 3 85 5 00		RAKES.		SHOVELS AND SPADES.		Mouse, per doz 0 35 1 50	
Caulking, each 1 60 2 00		Cast steel and malleable Canadian, list dis 60 to 60 and 10 p. c. revised list.		Canadian, dis. 45 and 2½ p.c.		Rat, per doz. 1 40 6 50	
MATTOCKS.		Wood, 25 per cent.		SIEVES.		TROWELS.	
Canadian, per doz. 8 50 10 00		RAZORS.		Wood rim, black, per doz. 1 05 1 10		Disston's, discount 10 per cent.	
American, 60 and 10 p.c. off list.		Geo. Butler & Co.'s, per doz. 8 00 18 00		" tinned, " 1 25 1 35		German, per doz 4 75 6 00	
MEAT CUTTERS.		Bokers', " " 7 50 11 00		Tin rim, per doz. 2 30 2 45		Brade's 5 00 10 50	
Enterprise, American, dis. 30 to 32½ p.c.		Wade & Butcher's, " " 3 60 10 00		" black. 1 8 2 25		S. & D., discount 35 per cent.	
German, 15 per cent.		Arbenz's, " " 9 00 18 00		SNAPS.		TRIERS.	
MINCING KNIVES.		Theile & Quack's " " 7 00 12 00		Harness, German, dis. 35 to 37½ p.c.		Butter, per doz 6 25 9 00	
American, per doz. 0 42 2 35		RAZOR STROPS.		Acme 3 00 5 00		TWINES.	
MOLASSES GATES.		Currier's, per doz. 1 25 3 60		Lock, Andrews 4 50 11 50		Bag, Russian, per lb. 0 21	
Stebbin's Patent, dis. per cent., 77½ per cent		RIVETS AND BURRS.		SOLDERING IRONS.		Wrapping, mottled, per pack 0 50 0 60	
NAILS.		4 mos. or 3 per cent. cash 30 days		Per lb 0 23 0 25		Wrapping, cotton, per lb 0 17 0 18	
Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.		Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.		WROUGHT SPIKES.		Mattress, per lb. 0 33 0 45	
Cut Nails (Steel). Add 10c. to the prices in list for iron nails.		Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.		Discount, 30 to 35 per cent.		Staging, " " 0 27 0 35	
Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04 delivered Toronto, Hamilton, London, and to places where freight from Pittsburgh is in less than carload lots does not exceed 2½c.; other places where rate is higher, excise is added. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.		Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.		SPOKE SHAVES.		Broom, " " 0 30 0 55	
Brads and finishing nails, special sizes, 80 p.c. from new list.		Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.		Wood, English 1 8 5 00		VISES.	
NAIL PULLERS.		Black M. Rivets (Norway Iron) 60 p.c.		Iron, American. 1 35 2 35		Hand, per doz. 4 00 6 00	
German and American. 1 85 50		Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. " " 1½ lb. boxes and cartons, 1c. per lb. extra, net.		Tea spoons, per gross 7 50 12 00		Bench, parallel, each 2 00 4 50	
NAIL SETS.		Burrs, iron or steel, 55 and 5 per cent.		Dessert, " " 21 00 00 00		Coach, each 6 00 7 00	
Square, round, and octagon, per gross 3 38 4 00		Terms, 4 mos. or 3 per cent. cash 30 days.		Table, " " 30 00 30 00		Peter Wright's, per b. 0 12 0 13	
Diamond 12 00 15 00		RIVET SETS.		Desert Forks, " " 24 00 00 00		Pipe, each 5 50 9 00	
NETTING.		Canadian, dis. 35 to 37½ per cent.		Medium " " 27 00 00 00		Saw, per doz 6 50 13 00	
Poultry, 67½ per cent.		ROPE.		Table " " 36 00 00 00		WASHER CUTTERS.	
OIL.		Boxwood, dis. 80 and 5 to 10 p.c.		SQUARES.		Per doz 4 00	
Canada refined oil (Toronto). 0 16 0 16½		Ivory, dis. 37½ to 40 p.c.		Iron, per doz. 1 65 2 90		Washers "Iron," 40 per cent., 4 months per cent.	
Carbon safety " " 0 18 0 00		SAD IRONS.		Steel, dis. 70 per cent., revised list.		WELL WHEELS.	
Canada w. w. " " 0 18 0 00		Mrs. Potts, per set. 0 62½ 1 00		Try and bevel, dis. 50 to 52½ p.c.		Amer., per doz., 8, 10 and 12 inch. 3 38	
American w. w. " " 0 00 0 21		N.P., per set. 90		STAPLES.		WIRE.	
Pratt's Astial. 0 00 0 22		SAD HEATERS.		Fence, galvanized 00 2% 00 2% Wrought iron, dis. 80 to 82½ p.c.		Brass Wire, 16 to 25 wire gauge, 12½ p. c. Copper Wire, 12½ p.c. rev. list discount. Annealed, annealed and oiled, galvanized 35 to 30 and 5 per cent. discount off revised list.	
OILERS.		Dome, Shepard's, per doz. 4 75 5 00		STOCKS AND DIES.		(In lots of 1,000 lbs., annealed oiled, and annealed and galvanized, freight will be prepaid when not exceeding minimum rate of 20c. per 100 lbs.)	
McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50		SAND AND EMERY PAPER.		STONE.		Bright, coppered steel and spring, 30 to 30 and 5 p.c. revised list, f.o.b. Montreal, Toronto or Hamilton.	
Zinc and tin, dis. 50, 50 and 10. Copper, per doz. 1 25 3 50		E. & A. sand, 40 and 2½ per cent.		Washita, per lb. 0 28 0 60		Broom Wire, per lb 0 05% 0 06	
Copper, per doz. 1 25 3 50		Emery, per quire. 0 55 0 90		Hindustan, " " 0 06 0 07		Clothes Line Wire, 19 gauge, per 1,000 feet 2 75 3 00	
Brass, " " 1 50 3 50		SASH CORD.		slips, per lb. 0 09 0 09		WIRE FENCING.	
Malleable, dis. 25 per cent.		Per lb. 0 22 50		Labrador, " " 0 00 0 13		Galvanized, 2 barb, 2½ and 5 inches apart. 2 20	
Galvanized, per doz. 2 25 3 30		SASH LOCKS.		" Axe, " " 0 00 0 15		Galvanized, 4 barb, 4 and 6 inches apart 2 20	
PENCILS.		Triumph and Morris, dis. 37½, 40 percent.		Turkey " " 0 00 0 50		Galvanized, plain twist, all delv'd 2 20	
Dixon's, per gross 1 00 4 25		Kempshall's, dis. 40, 62½ per cent.		Arkansas " " 0 00 1 10		Plain twist 2 20	
" Carpenter 2 25 3 60		Canadian, dis. 45, 50 per cent.		Water-of-Ayr " " 0 00 1 50		Terms, 60 days, or 2 per cent. in 30 days	
PICKS.		SASH WEIGHTS.		Scythe, per gross. 3 50 5 00		WIRE CLOTH.	
Per doz 6 00 9 00		Sectional, per 100 lbs 1 40 1 50		Grind. per ton 15 00 18 00		Ordinary, discount 25 per cent.	
PICTURE NAILS.		Solid, " " 1 10 . . .		TACKS, BRADS, ETC.		Painted Screen, per 100 sq. ft. 1 35 . . .	
Porcelain head, per gross. 1 40 3 00		SAWS.		Cheese-box tacks, blue, 80 p. c.		WRENCHES.	
Brass head, " " 0 40 1 00		Crosscut, McMillan & Haynes, per dozen 0 40 0 70		Trunk tacks, black, 80 p. c.		Acme, 35 to 37½ per cent.	
PIPE CUTTING MACHINERY		" Empire," McMillan & Haynes, per ft. 0 00 0 70		tinned, 80 p. c.		Agricultural, 70 and 10 per cent.	
Forbes Patent Die Stocks.—Curtis & Curtis, Mrs., Bridgeport, Conn.		Hand, Disston's, dis. 12½ to 15 p.c. S. & D., 40 to 40 and 10 per cent.		B.B.B. iron carpet, blued 80		Standard, dis. 60, 80 and 10 per cent.	
No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00		Crosscut, Disston's, per ft. 0 35		B.B.B. iron carpet, bright or blued (in kegs) 40		Coe's Genuine, dis. 30 to 32½ p. c.	
No. 38 Hand Machine, range 1½ to 4 in. 100 00		Hack, complete, each. 0 75		B.B.B. cut tacks (in bulk), 75 and 10 ¼ weights 40		Diamond, dis. 33½ to 35 per cent.	
No. 56 Hand Machine, range 2½ to 6 in. 175 00		frame only 0 00 0 75		Swedes, cut tacks, genuine, blued and tinned, 75 and 10 80		Towers' Engineer, each 2 00 3 00	
PLANES.		SAW SETS.		Swedes, upholsters 80		" S., per doz 5 80 7 00	
Wood, bench, Canadian dis. 55 per cent., American dis. 55.		" Lincoln," McMillan & Haynes, per doz. 0 ¾ 7 50		Swedes, carpet, blued and tinned 70		G. & K.'s Pipe, per doz 6 00	
		Whiting 6 ¾ 7 00		" lace 75		Burrell's Pipe, each 3 40	
				" brush 50		Pocket, per doz	
				" gim, blued, tinned & japan'd 75			
				Zinc tacks 35			
				Copper tacks 62½			

MONTREAL ROOFING COMPANY

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Improved Steam Condensing Exhaust Pipe Heads . . .

For attaching to Outlet of Pipe above roof. . . .

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THE BRADSTREET COMPANY,
Executive Offices Proprietors.

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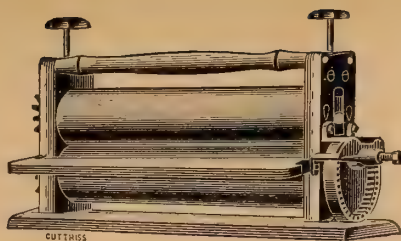
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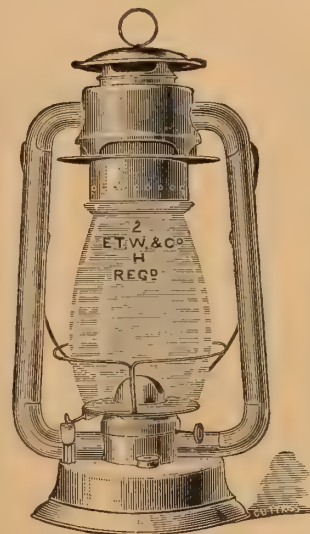
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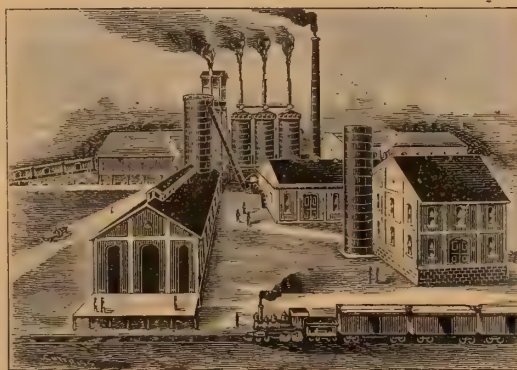
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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, SEPTEMBER 4, 1897

No. 36



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Best Anti-Friction Metal for all Machinery Bearings

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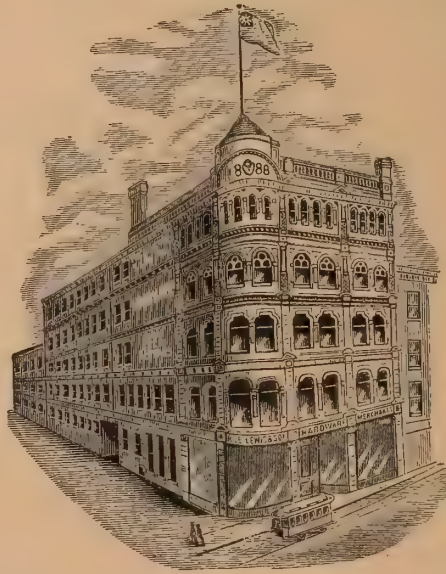
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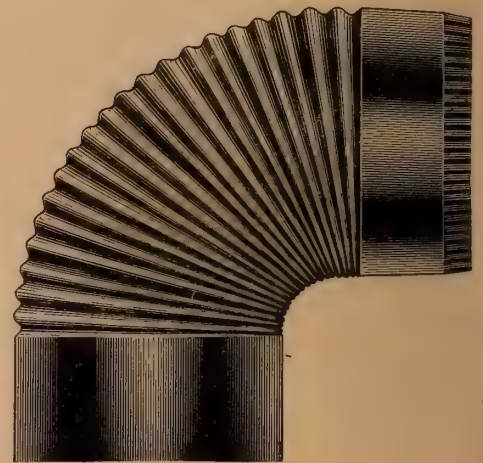
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Kemp's

STANDARD
ONE-PIECE

Elbows



ARE JUST WHAT THE TRADE REQUIRES.

Made in two qualities—

No. 1.—Heavy Smooth Iron, Long Ends.

No. 2.—Ordinary Iron, ½-inch Shorter Ends.

Present a most attractive appearance. Riveted ready for use. Cannot get damaged in shipping. Packed one dozen in a crate. Can be bought as cheap as ordinary pieced elbows.

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THE QUESTION OF CREDIT.

It is not so many years ago that the universal terms in the iron and hardware trade were six months.

After prolonged agitation the far-sighted members of the trade succeeded in having the terms on heavy goods reduced to four months, as they now stand.

The reform did not come a moment too soon, and it is regrettable that shelf goods were not put on the same basis.

Last winter some of the wiser heads in the business started a movement in this direction, and at one time there was strong hope of success, but eventually, owing to unfortunate differences of opinion between an Ontario firm and the rest of the trade, the proposition fell through. Naturally the trade, as a majority, did not care to bind themselves, and so give the firm in question an advantage. It is questionable, however, whether it would not have been wiser in the long run to have done so. Traders who are carrying on a good sound business, whether buyers or sellers, recognize the advantage of shorter credits, and, as a whole, they would deal

with the jobbers who gave them advantages in consideration of closer terms.

This would gradually drift all the lame ducks toward the firm who persisted in sticking out for long credit and eventually, like the famous Regent of Siam, they would have the most unpleasant kind of elephant on their hands. If the beast in his gambols caused some damage to his keepers nobody would be very sorry.

Perhaps, eventually, the majority will pluck up backbone enough to go in for this much-needed reform and carry it through, no matter whether some near-sighted individual firms refuse to fall into line at first or not.

No reform worth anything was ever secured without some initial inconvenience when the movement was first inaugurated.

Six months is bad enough in itself, but the trouble is that the evil does not stop there. The insidious "renewal" generally comes to the fore, and six months in a great number of cases ultimately means nine months.

Customers who demand six months credit in a very large number of cases are the kind whom the seller would be wise to leave severely alone.

The best plan of insurance against lack of employment is industry.

LARGE CEMENT CONTRACTS.

Some extensive contracts in Belgian cement for prompt and future delivery have been put through this week. One of the largest calls for 17,000 barrels, on the basis of \$1.85 ex wharf, Montreal, of which 5,000 is for delivery this season and the balance next season.

BETTER TIMES.

BETTER times are with us. There is no question about it. Some people of a rather pessimistic turn of mind will admit that the outlook has improved a great deal, but they are not so ready to admit that business itself is better. The point of view from which the pessimistically inclined, as a rule, look at the situation is prices. Unquestionably profits are and have been unsatisfactory for several years, but it by no means follows that because they are not what they used to be good times are not upon us.

When times are good profits are undoubtedly better than they are when times are bad, but we fear that if we are to judge whether times are good or no by the percentage of profits which ruled a decade ago good times we shall never have.

In a good many instances the profits of ten or more years ago will never be experienced again. The rapidity with which the factories now produce and the number of merchants there are to cater for the order of every consumer precludes it.

We are in a new era of economical conditions. That era means small profits and quick returns. And he only who is able to do business under these conditions will be successful—will have good times.

For the manufacturer or merchant who is up to date, who is ready to conform to the conditions, the prospect is pleasing.

We at the moment see what we were told we should never see again, namely, "dollar wheat." And what is most gratifying is the fact that Canada has an excellent wheat crop as well as the prospect of a good price.

Ontario has eleven million bushels more wheat than last year, and Manitoba has something like half that quantity more.

In Ontario the yield of fall wheat is estimated by the Department of Agriculture at 25.5 bushels per acre, and the quantity 24,268,158 bushels, against 17.2 and 15,078,441, respectively, last year, and of spring wheat 17 bushels per acre, and the quantity 5,489,821 bushels, against 13.8 and 3,519,322 respectively in 1896. Barley, both in regard to acreage and yield per acre, is slightly less than a year ago. In oats and rye there is an increase all round. In peas there is a decrease in both acreage and yield per acre. Beans, while smaller in acreage, show a larger yield per acre. Hay, as everyone knows, is an abundant crop. Although the acreage is smaller the total yield is estimated at 3,811,518 tons, or per acre, 1.63 tons, compared with .93 in 1896 and an average of 1.35 tons per acre for the period from 1882 to 1896.

All told, it is estimated that the receipts of the farmers of Ontario and Manitoba from their cereal crops will be something like twenty million dollars more than last year.

According to the report of the Government, just issued, it is expected the yield of wheat in Manitoba will be in the neighborhood of 21,284,274 bushels, or about 16½ to the acre. The yield of oats is 12,517,112 bushels, and of barley 3,644,788 bushels.

In the Northwest Territories the crop conditions are also good.

Besides the good crops and the better prices that are likely to be obtained for them, there are the dairying and mining industries to be taken into account. They were never in the flourishing condition they are to-day, and both promise further material expansion.

Then further gratifying features in the trade situation are to be found in the steadily increasing railway earnings and the clearing house returns.

The condition of the lumber industry is not, on the whole, satisfactory, although some of the loss of trade which we are likely to experience through the Dingley tariff promises to be made up by the improved trade with Great Britain.

Canada has indeed entered upon another cycle of prosperity, and he must be a pessimist who fails to recognize it.

BUYING AWAY FROM HOME.

THE practice which has become so common of residents of villages and smaller towns throughout the country getting various supplies from the departmental stores, etc., of the large commercial centres is an undoubted evil.

But lamentations or appeals to the loyalty of the residents who thus offend will not bring about a remedy.

The big stores in the large cities get the business chiefly because (1) they advertise attractively and (2) because they do business on the principle of small profits and quick returns.

Some of us may hold different views, both as to the efficacy of advertising and as to the wisdom of "small profits and quick returns," but there will scarcely be any difference of opinion as to the influence of those factors in drawing trade to the big departmental stores.

Not long since **HARDWARE AND METAL** was conversing with a well-known retailer in regard to the evil effects of the departmental stores, when the latter remarked with some warmth: "The trouble with the beggars is that they do so much advertising." This same retailer, as far as we know, does no advertising. But he nevertheless paid a high tribute to advertising as a business getter.

And what is sauce for the goose is sauce for the gander. Lamentations and appeals for loyalty to home merchants may do nothing; but judicious advertising and up-to-date business methods will do a great deal.

Country merchants, do what they may, will not be able to turn aside into their own stores all the trade of local customers which now goes elsewhere, but if they go about it in the right way they undoubtedly can so turn a great deal of it.

People in outside villages and towns do not spend their money with city departmental stores because of any particular love for these stores: They do so because, rightly or wrongly, they believe they can there get better value for their money. Disabuse their minds of this, and the local and not the city merchants will get their trade. And to this task each merchant in each country town should apply himself.

In applying himself to this task it is no forlorn hope either that the country mer-

chant is entering upon. If he will sell his goods under the same cash conditions he can, as a rule, part with his goods just as cheaply as can the city departmental store man. He, too, can pick up bargain lots to be utilized as leaders.

In advertising, give prices; and adopt the same course in regard to goods in the window. It is one of the most effective ways in which one can advertise. Figures, like a worm on a hook, attract.

A great many merchants, it is true, are averse to giving figures. It gives a cue to competitors, it is urged. This, it seems to us, is a narrow way of looking at the matter. The fact that they attract customers should outweigh all concern regarding their effects upon competitors.

There are too many merchants, in the city as well as in the country, whose carelessness in regard to up-to-date business methods is surprising. They pay little or no attention to window dressing, advertising, or anything else that attracts customers. They are more dead than alive.

The merchants who are to-day successfully competing with the departmental stores are the merchants who advertise and advertise prices, who secure and offer bargains, who devote attention to their window displays, and who hustle persistently for business. And what one merchant does another can do.

ANOTHER ADVANCE IN PIPE.

A STRIKING illustration of the advancing tendency of values on heavy material is iron pipe. The other week a general rise in prices was noted, and this week, as a result of the advance of 10 per cent. in the States, prices have again been moved up all round; the changes in detail being as follows in Montreal:

Black Pipe—	New List.	Old List.
½-inch	\$2 60	\$2 50
¾ to 1-inch	1 85	1 80
1½-inch	2 35	2 25
2-inch	2 84	2 70
2½-inch	3 91	3 70
3-inch	5 15	4 80
3½-inch	6 66	6 35
4-inch	8 97	8 55
Galvanized—		
½-inch }	3 10	2 95
¾-inch }		
1-inch	3 90	3 80
1½-inch	4 72	4 60
2-inch	6 55	6 40
2½-inch	8 98	8 80
3-inch	11 45	11 20
3½-inch	15 51	15 15

CHAINLESS WHEELS.

NOW that the agitation over the statements that chainless bicycles will drive the chain-driven wheels from the market next year has somewhat subsided there are a large number of persons versed in mechanics who offer genuine reasons why the chainless will not supersede the present type.

"It is easy to grasp why the chainless bicycle can never be a permanent success," said a bicycle man. "Up to the present time the effort has been to simplify the bicycle. The proposed change will be a move in the opposite direction. The bevel gear is far more complicated than the chain and sprocket, and of course that means more bother and care for the rider. It will be unable to survive the rough usage generally accorded the bicycle, besides being less smooth running owing to vastly increased friction. Theoretically as well as practically, the principle is all wrong. It is to all purposes going around the corner when not necessary. With the chain the power from the crank axle is conveyed to the rear-wheel axle direct. With bevel gears the power is

first passed from the sprocket bevel to the shaft, then from the shaft to the rear wheel. In consequence the power is forced to turn two corners before it reaches its destination. Another fact admitted by all mechanics which prevents the possibility of the bevel gear being a success is that it is impossible to cut bevels correctly on milling machines. To be perfect they must be planed by hand tooth to tooth, the expense of which process precludes its consideration in bicycle construction."

MORE SIGNS OF STRENGTH IN IRON.

IT was pointed out last week that heavy material generally was advancing; that notable rises in wire rods and steel billets had transpired, and that owing to this appreciation in raw material an advance in the price of many staple lines of domestic manufactures might be expected.

The present week brings further intelligence of higher prices on other lines of material. Montreal brokers last week closed contracts with importers in that city for supplies of angle iron at \$1.05. This week when they tried to repeat orders for

their customers they were asked an advance of 5c., the basis at point of shipment in the United States now being \$1.10. The same strong feeling was exhibited in regard to soft steel in bars.

Last week Montreal importers were successful in placing orders at 97½c. This week they are asked \$1, and there is a strong prospect of still higher prices.

It is not only in American iron that values point higher. High grade Swede and Norway also promise to be much higher. This is shown by the fact that importers in Montreal are now placing orders quite freely for next spring shipment in both descriptions. Makers in Sweden and Norway have so many orders to attend to that they refuse to book any more for immediate shipment this fall before navigation closes. In fact, all advices seem to point to a generally upward movement in all lines of iron material.

An evidence of the celerity with which the Canadian Government statistics are compiled is the fact that reports for July business have not yet been published.



Iver Johnson Revolvers

Iver Johnson Cycles . .

*Send for our Catalogues and Prices
They will interest you*

Honest Goods

at

Honest Prices

**IVER JOHNSON'S ARMS AND
CYCLE WORKS**

Fitchburg, Mass., U.S.A.



NEW USES FOR ALUMINUM.

THE superiority of aluminum over iron and other metals for both ordinary and scientific uses is now an undisputed fact; and if it were not for the cost of the separation of the element from its very common chemical compounds it would by this time have displaced iron in many of the uses in which the tenacity of the latter material has been found most advantageous. However, the expense of production of this element is being gradually reduced as new schemes of separation are being found, and it is now cheap enough to warrant its employment for various purposes. These have been gathered together in an article by a contributor to *The Metal Worker*.

Already the United States Congress have made enquiries into the advisability of using aluminum or alloys of that metal with copper as material for the smaller coins. The lightness of these coins would prevent a great deal of friction and consequent wear. However, it is desirable that the value of moneys should not alter, a fact which the United States Government has already learned. As aluminum can be put to so many uses a great deal of energy is being spent on the devising of schemes for its cheap separation, and when the production of aluminum is cheapened, immediately would the value of the coins fall.

Another new and very large use for aluminum which has already found its way into the market is the use of aluminum for lithographic plates. Up to the present time all the best lithographs have been made on flat bed presses from stone plates, and by this process the printing is extremely slow and tedious; also the adjustment of the stone on the bed of the press so that it shall be exactly level and in position, and the consequence is that 6,000 impressions a day is about the maximum number which it is possible to obtain from the old method of printing with the flat bed press from stone plates.

By the use of aluminum plates, however, they put the transfers on an aluminum plate and bend this plate around a cylinder, so that the printing is done from a rotary surface in the same manner that the daily papers are now printed. The limit of the speed in printing this way is practically the rapidity with which the sheets with the impressions on them can be removed from the mouth of the machine. Only a given number of men can work around the delivery end of one of these presses, and the limit of these presses in printing is somewhere about 25,000 impressions a day.

Aluminum in one form or another has been used, to a certain extent, for the puri-

fication of water, and this process is now rapidly being developed and promises to consume large quantities of the metal. The action, however, is such that only chemists can understand thoroughly. Even the sulphate of alumina and alloys of the metal are being used advantageously for the same purpose.

This metal, too, is replacing a great deal of zinc and copper, which metals have been formerly used in the paper trade in the manufacture of glazed paper, celluloid, etc. By taking aluminum plates and sand blasting or scratch-brushing them a different surface can be obtained. Aluminum for this purpose is not only cheaper, but the plates being so much lighter make the handling of them easier, and the life of a plate used for this purpose made of aluminum is practically unlimited, while with the copper plates as soon as the plating wears off they have to be replated, which is quite expensive.

There is a large and steady use for aluminum in the cooking utensil and novelty trade. The use of aluminum for these and similar purposes is constantly growing and the field is continually growing wider, as the manufacture of one article suggests another and side lines are being constantly taken up.

The use of aluminum in the manufacture of steel is one of the large single uses of the metal, and is now used constantly in the proportion of about four ounces to the ton for the purpose of absorbing the occluded gases when the metal is poured into the mold, and thus allow an ingot to be cast which is solid and does not contain blow holes or other defects caused by the presence of gases. Although such a small quantity of aluminum is used to the ton, the use of aluminum for this one purpose is very large.

Such articles as baggage checks and checks and blanks of all kinds for key tags and similar articles are now made extensively of aluminum, owing to the fact that they are not only lighter but cheaper than nickel-plated brass.

Aluminum is coming into very extensive use in the manufacture of centrifugal machines. If the mass of a machine is reduced one-third the tendency to burst is only one-third of what it was formerly, provided of course that the tenacity of the different materials employed is the same.

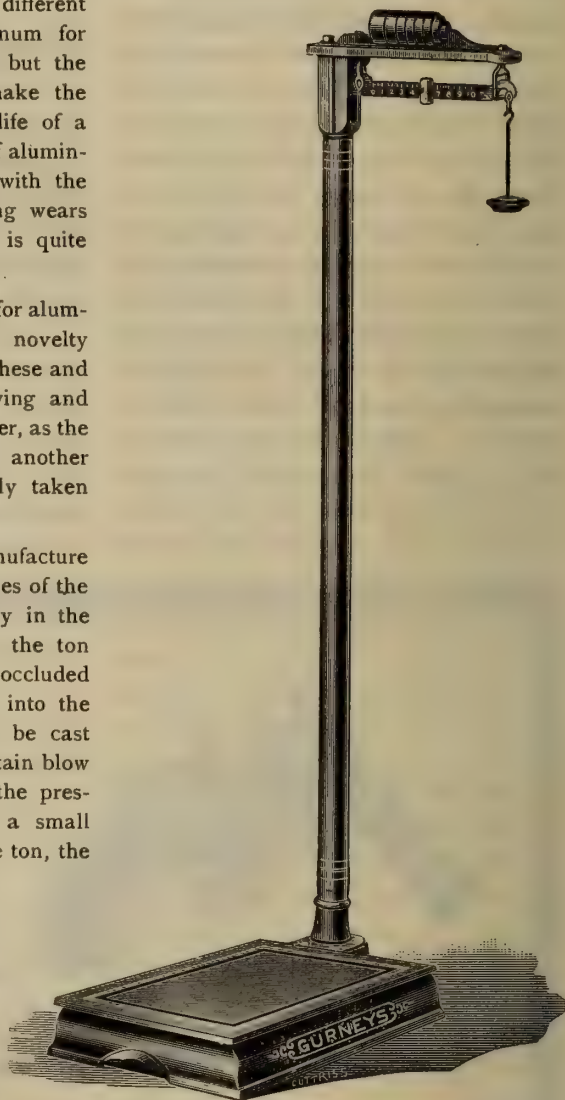
Its use in horseshoes is becoming quite common.

There is a growing demand for aluminum in the construction of small boats and parts of war vessels, such as gunboats and tor-

pedo boats, where it is desirable to reduce the weight as much as possible.

A BATHROOM SCALE.

The accompanying cut is an illustration of a bathroom scale, which the Gurney Scale Co. has put upon the market. It is constructed of iron and brass, and finished in pale blue enamel, with nickel-plated beam and sliding poise. A tall pillar places the beam on a level with the eye, and weights may be obtained up to 250 pounds



by 1 ounce divisions. As the platform is only 10 inches by 14½ inches, small floor space is required.

A SMELTER FOR VANCOUVER.

A Vancouver press despatch reads: "Word has been received here that a London syndicate, which has undertaken a proposal to erect a smelter here, has received the necessary capital and will commence construction work this winter, the works to be in operation by June next. The capital of the company will be £250,000, and besides the smelter a refinery will be built. The smelter will have a capacity of 350 tons daily."

IRON IN THE SOUTH.

BRADSTREET'S says: The signs of revival in iron and steel and the preceptibly hardening tendency in prices of Bessemer pig are taken to indicate that this industry, one of the last to feel the influence of reviving business conditions, will soon mark a distinct measure of improvement over the depressed conditions so long ruling. The number of resumption reports in this industry are on the increase, and it is conceded that the ending of the soft coal strike in the central west would remove the most important check to further expansion in the industry. The better feeling is already reflected in the greater activity reported in the iron ore trade of the lakes. The increasing demand alike for home and export purposes is also making itself felt in the southern industry, as may be gathered from the reports of increasing pig-iron tonnage from the Birmingham district. The request for pig iron is so great, especially for export, says a recent dispatch, that two more furnaces are preparing to start up.

The outlook for the southern industry is so bright as to lead The Baltimore Manufacturers' Record to print on its front page, under the head of "Southern Iron Prospects," extracts from three northern newspapers, pointing out the advantages the south affords as a field for iron manufacturing. A Nashville correspondent of The New York Evening Post is quoted as saying that southern pig iron can be exported at a profit, while northern and western iron cannot, and furthermore that it costs \$3 to \$4 per ton less to make a ton of pig in Tennessee and Alabama than it does in the most favored districts of the north and west. An Ishpeming, Mich., correspondent of The Chicago Times-Herald adds his testimony to the effect that Birmingham, Ala., furnaces can make pig iron cheaper than it can be produced anywhere else on earth, while even The Philadelphia Record admits that the southern states are certain to prove powerful competitors of northern states in foundry-iron production, and may yet become powerful factors in the manufacture of pig iron for steel making. "It behooves our iron manufacturers in Pennsylvania," says the paper last named, "to look at these possibilities and to prepare themselves to meet them, otherwise the one-time preponderating manufacturing business of this state may become a thing of the past."

There is little that is new to readers of Bradstreet's in the above statements except in that they indicate a fuller appreciation on the part of the northern and western press, and presumably of their readers, of the possibilities in the southern iron trade. Early in the present year, it will be recalled,

ALWAYS WORTH WHAT THEY COST.

No man can ever be "stuck" with **THE SHERWIN-WILLIAMS PAINTS**. They are always at par—worth every cent they cost. No depreciation, no loss, no risk with them.

Any man who has bought them and finds he cannot sell them, or is dissatisfied with them, has only to let us know and we'll return him his money.

We know if he can't sell them there's something wrong—not with the paint—perhaps not with the man, but something is wrong somewhere, and we'll find it out and put it right. We will get that trade sooner or later—it may be "sooner" or it may be "later," but one thing is sure, **we'll get it**. That's what we're in business for—to make paint and sell it, everywhere.

S.-W.P. can be sold—sold largely, and sold to advantage wherever paint is used. And we know it.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

Bradstreet's gave space to a letter from Mr. James Bowron, of the Tennessee Coal and Iron Co., in which, after reviewing the progress of the production of pig iron abroad and in this country since the beginning of the present century, that gentleman gave the sales of Alabama pig iron for export during the seven months preceding at 92,000 tons. The prices realized, said Mr. Bowron, were sufficient to induce a continuance of the movement, more especially as it was possible that familiarity with the American iron might result in the willingness of European consumers to pay the full market prices for this product, which had shown its value at very low rates. Mr. Bowron added that he thought it would be possible to continue the business even when foreign prices receded from the comparatively high quotation then ruling. The steady export trade doing is the best evidence that the Birmingham iron is meeting the conditions imposed upon it by the aroused competition from English and continental makers.

In another part of his article on the efforts of the southern makers to provide a foreign outlet for their iron, Mr. Bowron noted the fact that a systematic effort to place our iron abroad was made as early as 1894, and business was on the point of

opening up when the sharp domestic demand for iron in the spring of 1895 summarily stopped the budding trade, because pig-iron producers were thus assured of a certain profit more tempting than the uncertain returns of export trade. If, as seems probable, the growing activity in the domestic iron and steel trades should result in an advanced range of prices, the southern producers may again be tempted to choose between the moderate returns from the foreign export trade and the speedier and perhaps much more remunerative demand from domestic sources. It is doubtful, however, if, with the advantages of a large foreign outlet being provided, the southern makers will let the prices of pig iron solely for export interfere with this trade. The better course of profitably supplying the large home demand for their product, while conserving the interests of American iron makers abroad, would seem to at once suggest itself, as it no doubt already has to the makers of southern iron, who are to be congratulated upon the steadily improving demand for their product alike at home and in foreign countries.

The postal service of the United States costs \$9,000,000 a year above receipts, while that of Great Britain yields a profit of over \$14,000,000, that of France nearly \$10,000,000, that of Germany \$6,000,000, that of Russia \$8,000,000, and those of even India and Japan \$1,500,000.

WORK WELL, BUT REST.

IT is overwork and not hard work that kills. Every man, whatsoever his business or profession, is justified in working hard. Work keeps the body in health as well as the wolf from the door. But no man is justified in over-working and under-resting himself.

Over-working and under-resting are to-day common experiences. And the concomitant is broken down, debilitated and prematurely old men.

Man, like a piece of machinery, can be over-worked, and, like a piece of machinery, he must pay the penalty therefor.

It is often not until a piece of machinery has collapsed that the injury done by over-work has been realized. It is the same with the over-worked man.

He is a deluded man who imagines he can over-strain his brain and his muscle for fifty weeks in a year and then recuperate in the two remaining weeks.

It is an excellent thing for a man to take a few weeks' respite every year from business or professional cares; but it is better still for him to daily take that rest which nature demands he should.

He is a foolish engineer who is so sparing in the use of oil upon his engine that its bearings are not properly lubricated. And he is an unwise man who robs his body of that recreation and rest which are necessary to keep it from rusting and breaking down.

Work well, but rest well.

CATALOGUES, BOOKLETS, ETC.

The Dixon-Woods Co., Pittsburg, Pa., have just issued a pretty catalogue and price list in the form of a pamphlet entitled "How to Save Gas." Besides the instructive information incidently given the work is rendered further interesting by the readable description of the "Pittsburg" heaters, stoves and fire fronts. Directions for setting stoves are also given. One may be had on application to the firm.

ANOTHER MONTREAL BROKER.

The latest addition to the great army of mercantile brokers is Mr. Alexander Gibb, Montreal, a gentleman well known to the retail hardware trade through his long connection with Messrs. Crathern & Caverhill. Mr. Gibb is a Scotchman and possesses all the business shrewdness characteristic of his race. He commenced life in the railroad business, and came to Canada some fifteen years ago to enter the service of the Grand Trunk Railway, with whom he remained but a short time. Recognizing that the commercial world offered a wider scope for his energies and abilities than did railroad-

ing, he then entered the employ of Messrs. Crathern & Caverhill, with whom he has been for nearly fifteen years as confidential clerk. He has filled the position with credit to himself and satisfaction to his firm. Mr. Gibb has secured the representation in Canada for a number of well-known Old Country, United States and Canadian hardware firms, and has opened an office and sample room at 22 St. John street, Montreal. If energy and ability count for anything, Mr. Gibb's future success is assured.

EDMONTON TO THE KLONDIKE.

H. S. Howland, Sons & Co. have received a neat little folder from Ross Bros., wholesale and retail dealers, Edmonton, Alberta. Inside is a list of miners' supplies which the firm keeps in stock, with a line at the bottom which reads: "We have everything a miner wants—except gold." On the back of the folder is an interesting table showing the distance from Edmonton, both by water and overland routes, to the Klondike. Subjoined is the table:

OVERLAND ROUTE.	Miles.
Edmonton to Peace River crossing	260
Crossing to Forks of Nelson	240
Forks to Junction of Nelson and Liard	120
Nelson to Dease up Liard	160
Dease to Pelly	170
Pelly to junction with Lewes	220
Junction to Klondike	200
	1,370
WATER ROUTE.	
Edmonton to Athabasca Landing	96
Athabasca Landing to Grand Rapids	165
Grand Rapids to Fort McMurray	87
Fort McMurray to Chipewyan	185
Chipewyan to Smith Portage	102
The Portage	16
Fort Smith to Fort Resolution	194
Fort Resolution to Providence	108
Providence to Simpson	161
Simpson to Wrigley	136
Wrigley to Norman	184
Norman to Good Hope	174
Good Hope to Peel River	252
Up Peel River	18
Peel River to Summit	30
Summit to La Pierre's House	30
La Pierre's House to Porcupine	30
Porcupine to Junction of Yukon	400
Junction to Klondike ..	300
	2,728

THINGS THAT COUNT.

Promptness counts. Most clerks are boys, and most boys like to fool, and when a customer comes in there is sometimes delay—customers should never be called upon to wait unless there is very evident reason.

Accuracy counts. A system that insures prompt and accurate delivery makes friends of customers—and that counts a good deal—inaccurate charges count the other way.

Nothing counts more in retaining the good-will of customers and solving whatever difficulties may present themselves than uniform and unvarying good nature.—From But—.

OIL HEATERS.

AT this season of the year, when the nights are getting cool, a very handy article to heat a room with is a coal oil heater, and one that all hardwaremen should keep in a conspicuous place during the fall months. **HARDWARE AND METAL** was shown the completeness of one of these articles last week, and we must say that it is a thing of beauty. The cold air from the room entering through an aperture in the bottom of the heater passes both inside and outside of the round burner. Becoming thus intensely heated the air expands and with increased velocity rushes up the tubes and escapes at the top of the heater. In addition to the tube described, there are four outside tubes which connect above the mica section with the main tube and materially increase the effectiveness of the principle. The most important results obtained from the application of this principle are the vigorous circulation and even temperature maintained in all parts of the room. There is a sliding pan underneath the stove which prevents oil or wick clippings dropping on the floor.

PERSONAL MENTION.

Mr. Alex. Sclater, who represents the Sherwin-Williams Paint Co in Western Ontario, has returned by the ss. Lake Ontario from his two months' trip abroad, and will be among his old friends and customers next week with renewed strength and vigor to fight the battles for S. W. P.

Mr. C. Holden, the popular manager of the Sanderson Percy Co., Toronto, met with a very serious accident last Thursday evening which resulted in the breaking of one of his ribs. He was riding his wheel up that narrow strip of navigable road on Avenue road just below Bloor, when, unfortunately, meeting another rider coming down they both turned off to pass one another but in the same direction, and a spill was the result. Mr. Holden is now confined to his bed, but is doing nicely.

WIRE NAILS

WIRE - TACKS

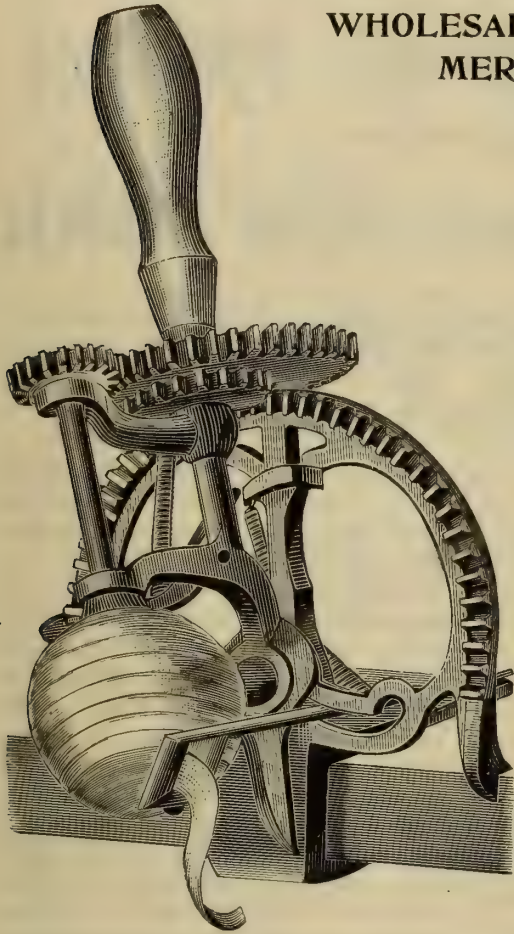
Ontario Tack Co.

HAMILTON

H. S. HOWLAND, SONS & CO.

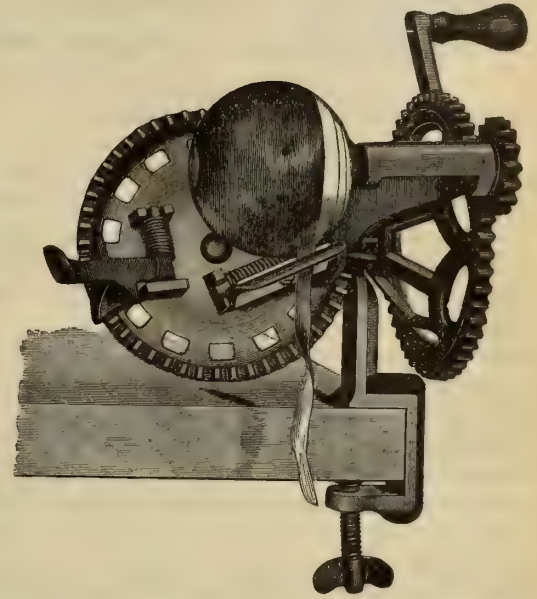
WHOLESALE HARDWARE
MERCHANTS

...Toronto



APPLE PARERS

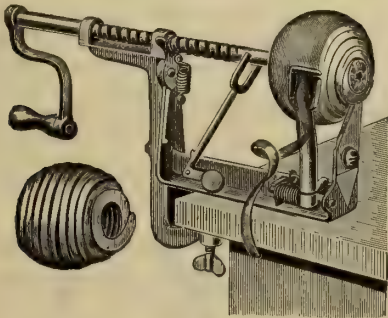
Season
1897



Woodyatt's Hudson
PACKED 1 DOZ. IN BOX.

GOODELL'S NEW LIGHTNING

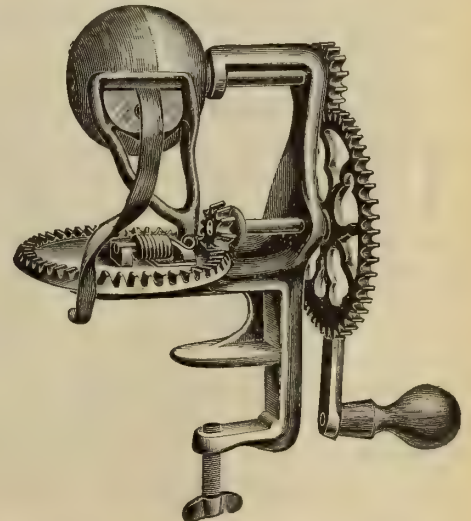
Fastest Hand Paring Machine in the World.
Packed 1 Doz. in Box. Weight, 47 Lbs.



White Mountain

PARER, CORER AND SLICER
1 DOZ. IN BOX. WEIGHT, 25 LBS.

Our
Prices Right



Goodell's Turn Table

Strong and Reliable.
1 DOZ. IN BOX. WEIGHT, 35 LBS.

Guns, Rifles, Revolvers and Ammunition.

Axes, Cow Chains, Lanterns, X-Cut Saws and Files.

Graham Cut and Wire Nails are the Best.

SEND US YOUR ORDERS.

PROMPT SHIPMENTS.

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The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

—NEW YORK

Catalogues and Price List on application.

ALUMINUM BICYCLE LOCK.

THE latest use which aluminum is put to is in the manufacture of cycle locks for the preventing of theft and the unauthorized use of cycles. HARDWARE AND METAL was shown a cycle lock this week secured to the fork of the back wheel, just under the saddle, by means of clips that are adjustable to any ordinary size of fork. It has a chain coiled inside of the lock, which can be drawn out, passed through the wheel, and the end of the chain locks by inserting it into an opening in the lock. To unlock the key must be used and the chain disappears, being drawn into the lock by means of a spring. Nothing could be more convenient or reliable. The chain being tightly wound in the lock, there is no rattling. This lock is quite an ornament on the bicycle and only weighs three ounces.

STEEL HORSESHOES.

THE Montreal Rolling Mills, in making their fall announcement, call special attention to the XL steel horseshoe they are turning out. These shoes are in two weights, to be known as "New Light Pattern" and "Extra Light Pattern." The former is being placed on the market for the first time, and is made in various sizes and weights. These shoes are made of the best soft steel, and the makers claim that

they will not split and will always present a much finer finish than an iron shoe, though the cost is but a trifle more. Their celebrated "Toe Weight" steel horseshoes continue to be in big demand.

BICYCLEISMS.

The Stearns factory is still running on full time. Manager Buffum figures out that he has sold more racing wheels than any other concern in Canada.

The Goold Bicycle Co. received a foreign order last week for 300 '98 "Red Birds," and the prospects for the coming season look particularly bright, warm words of praise for the '97 wheels coming from all quarters, with scarcely a single complaint.

It is said that a young engineer in Berlin has devised an apparatus consisting of a means by which two connected cog-wheels are made to revolve the same way, with the result that the speed is claimed to be quadrupled with half the amount of energy in driving.

A number of American cycle manufacturers will manufacture chainless wheels next year, the list including the Pope Mfg. Co., White Sewing Machine Co. and Barnes Cycle Co. Messrs. H. A. Lozier & Co. are also showing one at their Toledo factory, but, unless there should be a great demand for

the chainless pattern, the "Cleveland" people aver that they will not put a model of this description on the market.

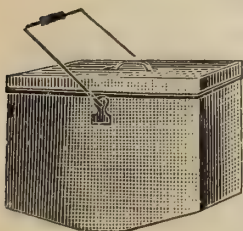
RICHARDSON HOME AGAIN.

CHARLIE RICHARDSON, of the Tourists, Canada's representative in the I. C. A. championships at Glasgow, returned to Toronto on Monday. He expressed himself as delighted with the treatment accorded him across the water, and, speaking of the championships, he was of the opinion that had he been on the ground three weeks beforehand he would have made a good showing, for he did not believe that the amateur representatives at the meeting were any faster than the Canadian "push." He reached Glasgow only the day before the meeting, and in his heat of the mile amateur championship he landed behind Fawcett, the rider who finished second to Stræder in the final. Richardson described the race between Stocks and Chase for the 100 kilometer "pro" championship as a wonderful exhibition of scientific pacing, both men being served by a great array of "quads" and "quints." Owing to an accident to one of Chase's machines, the former gained an advantage which the latter, although he was riding stronger at the finish, could not overcome.

The Tourist crack announces that he is ready to meet any amateur in Canada in a match at any distance.—Cycling.

ESTABLISHED 1860

INCORPORATED 1895



Ash Sifters

If you want a Sifter that will sift ashes without filling your eyes with dust, send us along your order for the

"ROYAL"

COAL HODS,
STOVE PIPES, ELBOWS,
FIRE SHOVELS,
STOVE BOARDS, Etc.

THE THOS. DAVIDSON MFG. CO., Limited, MONTREAL

A. ALLAN, President.
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FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
Manufacturers of the . . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch : Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

... **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage
Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

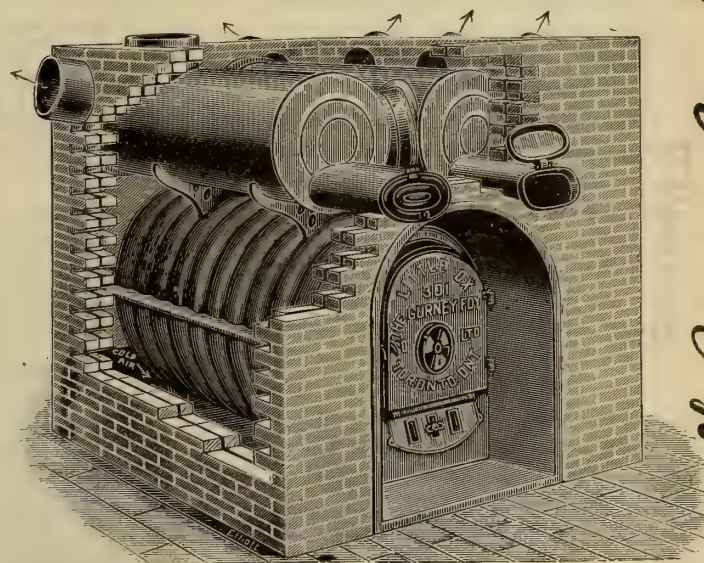
A THOROUGH SUCCESS!

The most powerful furnace
of its class in the market.

THE FAMOUS . . .

LITTLE OX

WOOD
FURNACES



BRICK SET--WITH DOUBLE RETURN FLUE RADIATOR.

Made with Triple or Double Return Flue Radiators, have a guaranteed capacity up to 30,000 cubic feet. Easy to clean and regulate. Smoke and dust proof. Take 3 feet rough wood. Have extra long fire travel, and are either portable or stationary for brick setting. Write us at once for full details and prices.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.

The Gurney Foundry Co.

RUBBER FOR BICYCLE TIRES.

THE caoutchouc tree grows in various parts of the world, but the variety of rubber possessing the necessary elasticity for use in pneumatic tires is found only in South America, and goes by the name of Para rubber, so called from a district around the estuary of the great system of rivers in Brazil. One reason for the expensiveness of Para rubber is that its production is carried on in a wasteful and spiritless fashion. The native in the tropics is satisfied when he has made sufficient to feed him for the day. In this way, if by tapping a tree in the morning and returning in the evening to carry away the gourd placed to receive the juice, he has made his daily food, he is content. If worked scientifically and according to system and superintended by European labor, the produce would no doubt be greatly increased. A company was recently placed on the market to carry on rubber tree planting and production in Mexico on approved lines, and undoubtedly there is a great field open for the introduction of European capital and ideas into the cultivation of the rubber tree forests of South America.

As the rubber flows from the tree it is a milky juice, resembling cream in color and consistency, but it gradually thickens on exposure to the air. One tree yields a yearly supply of three pounds or more of rubber, and the supply increases by a pound annually for several seasons after the first year's tapping. The rubber tree is always found in the neighborhood of rivers.

The plant required to turn out pneumatic tires, commencing with the raw rubber, involves a large capital outlay. On being brought into the factory the raw material has to be purified of the sand and other impurities and adulterations usually present. To effect this purification it is washed with warm water and broken up by being passed through a mill, and eventually comes out from the rollers in the form of a long thin sheet. These sheets are then hung up in a stove to dry for some days. The next operation is to reduce its strips to a thick paste by the addition of naphtha, sulphur being also added to effect the all important vulcanization. The paste is next spread on a linen cloth by machinery constructed for the purpose and passed over a heated surface to evaporate the naphtha. The rubber, which is then in the form of a dry sheet is cut up into strips 6 or 7 inches wide. The vulcanization, which gives the rubber its grey color and elasticity, and renders it proof against cold and heat, and the solvents which reduce it in its unvulcanized state, are effected by combining about 5 per cent. of sulphur with the strips in moulds under a heat of 270 to 300 degrees. After issuing from the

vulcanizing press in the form of an oblong strip, the rubber is ready to be passed into the shops where it is made into the finished tire.—The Cycle.

STRAIGHT TALK TO YOUNG MEN.

THE success or failure of every young man depends upon his own efforts, and the sooner he discovers this fact the better it will be for him. The schooling a young man gets in acquiring a few paltry dollars is exactly what he must have in order to retain his accumulated wealth and use it in a right manner. We append a few business rules that should be adopted and strictly adhered to by the young man just starting out on his business career:

His first ambition should be to acquire a perfect knowledge of the details of his business, so that he will not be at the mercy of inefficient or incompetent subordinates.

He should acquire a correct epistolary style, for he is judged by the business world according to the expression and style of his letters.

He should never suffer a letter to remain unanswered, however unimportant it may seem.

He should never fail to meet a business engagement.

Confine his capital closely to the business he has chosen.

Avoid display and choose associates discreetly.

Avoid litigation, but in case of necessity employ competent counsel. Fortunes have been lost by "every man being his own lawyer."

Never "run down" a competitor's goods, remembering that he has friends as well as you.

Never misrepresent, falsify, or deceive, or allow it to be done by those under you.

Have one rule of moral conduct, and never swerve from it.

Never refuse a choice when offered.

Never sign a paper for a stranger.

Personally inspect your accounts at least monthly.

With the above suggestions as a groundwork upon which to build a business career, your structure will rise storm-proof; and, if a little longer in reaching the topmost course, its character for solidity and business probity will more than repay. All that should be done for any young man is to help him to help himself. The individual who depends upon others is a clog in the wheels of progress. You cannot pass upon the reputation of your ancestors. You are either genuine or counterfeit and the world knows it. Bear this in mind.—New Ideas.

THE PRODUCTION OF ALUMINUM.

IT has only been a few years, comparatively, since aluminum was practically classed among the precious metals, having a value nearly, if not quite, that of gold. Indeed, until about 1858 it was almost exclusively a laboratory product, and it was not until the introduction of electrical appliances that it became possible to regard the metal as one to be used for general purposes. Since cheaper and better methods of producing aluminum have been employed, the output has rapidly increased, until now it is confidently stated by some that before another year is gone only three commercial metals—iron, lead and zinc—will be rated at a cheaper price. Practically all the aluminum in the world's market, up to and including 1895, was produced in France, Switzerland and the United States. The three countries, with slight additions from others, produced in 1895 about 7,000 lbs. daily, of which the largest amount was furnished by France, the next by Switzerland, with the United States as a close third. Each of these, as well as Great Britain, added largely to their aluminum plants in 1896, with the result that the output reached about 14,674 lbs. daily. According to Mr. E. Germain, the United States consul at Zurich, in a recent consular report, the producers of this useful metal abroad have added largely to their plants. The additions to the works at Neuhausen, in Switzerland, when completed, he says, will add about 5,940 lbs. to the daily production. He also states that a German-American syndicate has planned the erection of works for the manufacture of aluminum at the waterfalls of Sarpfoss, in Norway, to be ready for operation by the beginning of next year, and that these works are to have a capacity of some 6,000 lbs. daily. Consul Germain estimates that with the additions in Switzerland, the new plant in Norway, and the increased capacity of the Niagara Falls plant, the output of aluminum in 1898 will average 42,460 lbs. daily, or about six times the amount produced in 1895. If the figures given by the above-named official are correct, they exhibit almost an astonishingly early increase in the world's supply of this useful metal, the realization of which, it is almost needless to say, will be heartily welcomed. The malleability of aluminum, its exceeding lightness, and its immunity from rust, render it a favorite metal for many purposes, and its more general use has only been delayed through its costing considerably more than iron. A marked increase in the world's supply will speedily remedy this great objection.—Philadelphia Ledger.

Some people take so long loading their gun with brilliant ideas that they die before they have a chance of firing it off.

Bicycles..

**CAVALIER
and PELHAM**

At Wholesale Cost Price, to clear out balance of our stock.
Do not delay writing for prices.

Caverhill, Learmont & Co.

HARDWARE AND METAL
MERCHANTS

Montreal

ALWAYS COLD.

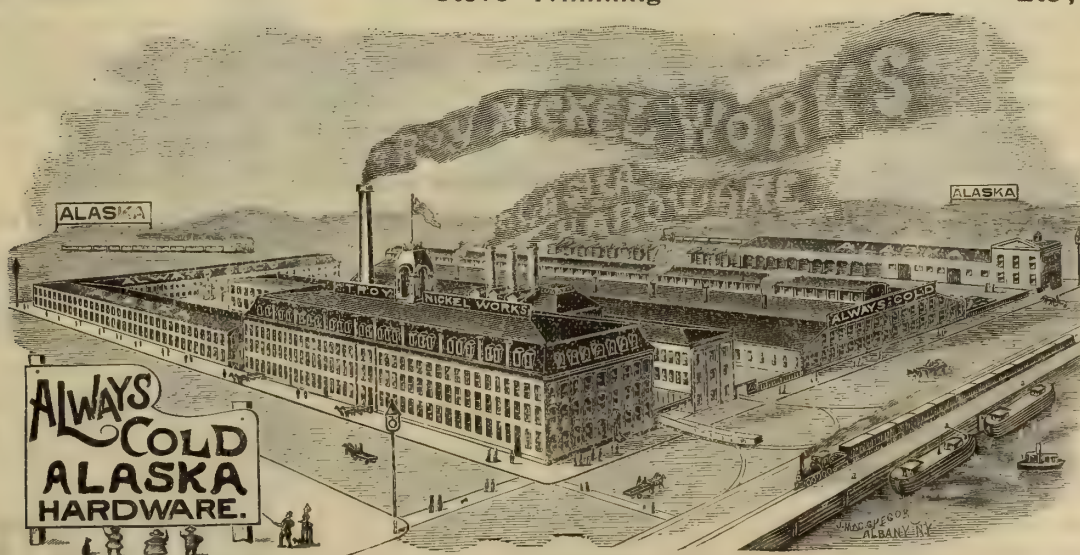
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

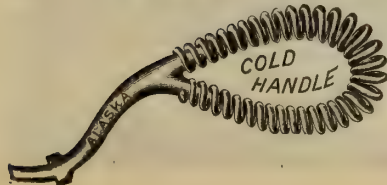
ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc, Etc.



To Canadian Trade

If your Jobbers don't carry this line
send to us for prices. We will land
the goods at your door. WRITE US
ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

ENORMOUS OUTPUT OF ENGLISH FILES.

IN the file trade the old adage that supply creates demand is being verified. Although almost every week additional plant and machinery for producing files is being put down, and the means of production enormously increased, there seems to be a market for all that can be produced. Manufacturers are congratulating themselves on their foresight in placing themselves in a position to meet the market, and can only wonder what would have been the condition of things if they had been to-day dependent entirely on hand labor. A gentleman who knows every house of moment in the trade, and what their output is, informs us that, taking a very moderate estimate, not less than 60,000 dozen of files are being produced weekly in Sheffield, or over thirty-seven millions of files per year. Such an enormous demand is a clear indication of the state of the engineering branches, and it is with the gravest apprehension that manufacturers of files and steel look forward to any strike in a trade so intimately connected with Sheffield. At the present time the great difficulty experienced by manufacturers is the obtaining of file cutting machines. A German machine is on the market, but those few firms who have adopted it are chary of allowing it to be open for the inspection of probable purchasers. The local agent, however, has now made arrangements for the putting down of a machine which may be inspected by anyone interested in the trade, and sales are expected to follow.—Hardwareman.

DEFECTIVE GOODS.

Much complaint has frequently been made by plumbers that the quality of goods they have ordered from manufacturers has not been up to the standard required. In soil pipe, sanitary earthenware, and even brass goods, have many defects been discovered from time to time. In many instances the manufacturers have evinced a disposition to do what was right by either replacing the defective goods or not making a charge. In some instances, however, the plumber has been unable to get any satisfaction whatever, and this fact has made them very careful whom they are dealing with.

TIMES ARE PROSPEROUS.

Everything points to an exceptionally heavy fall trade with the McClary Manufacturing Co., London. The entire works are now being run three hours over-time each evening. They are making many new lines for this season's trade in both heating and cooking, and are working on the patterns of a new triple heater to be named the

"Yukon," which is built on the same principle as their "Famous Magnet" furnace, having steel horizontal smoke pipes and a direct and indirect draft. The linings are made so that they can be replaced through the front door without taking any of the stove apart. It is also constructed so that if the linings warp there is an outer body which keeps the smoke from entering the hot air chamber. Another advantage is that the legs and all nickelled parts can be packed inside the stove for shipment, so that nothing but the stove body itself is exposed when being shipped.

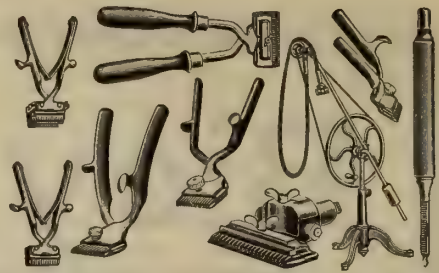
TO CLEANSE A WASTE PIPE.

It is very often asked what is the best way to clean a waste pipe from a bath tub when a foul or stagnant odor comes from the same. Make a plunger washer a little larger than the waste, and draw it back and forth. Then for the lead waste pipe to the trap have a pliable long wire handle brush with twisted stiff hog's hair to reach to trap back and forth, and by using soda water force it out. After having dislodged the material which clogs on the sides by the hot solution you can take an ordinary force pump and force a rapid current of water through the waste pipe. This current will usually carry off the dislodged slime. The hog's hair brush should clean the pipe beautifully if you can get at it. There should not be any perceptible odor, however, from a bath trap. We would advise you to look into this. Perhaps the trap is unsealed, or it may be that the lip which dips in the water is not gas-tight. If you have a smoke machine in the shop you should apply a test and see if the trap is all right.

GOT ONE IN ON THE BOARD.

A bright young journeyman plumber, up for examination, came to this question, that struck him as absurd. "If a bullet is dropped in a well and it takes five seconds for it to strike the water, how far is it from the top of the well to the surface of the water?" The young mechanic answered; "Heathen mythology says that when Jupiter kicked Vulcan out of heaven it took him forty-seven days and nights to fall. If so, how far is heaven from Kosciusko, Miss?"—Plumbers' Journal.

The latest thing in a chainless bicycle is the invention of Wm. Thomson and his son, E. S. Thomson, of Ingersoll. The gear will be no heavier than a chain. There is no chance for dust or dirt to gather, and the friction is so little that it can hardly be perceived. Messrs. Thomson say their gear will run half as easily as a chain, and approaches a ball bearing as nearly as possible. After an interview with several prominent bicycle manufacturers they have decided to put the gear on the market for 1898.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



ONE DOLLAR A YEAR

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Sample Copy Free

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Publisher
271 Broadway
New York



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring, "The Latest and Best." Sold by all Leading Jobbers in Canada.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales made and repaired.

Write for Catalogue.



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PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. For moderate. **MARION & MARION, EXPERTS**, Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively Mention this paper.

GALVANIZED SHEETS

"GORDON CROWN" and "FALCON"

THE TWO LEADING BRANDS.

Our stocks are now complete in all sizes and gauges.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

Indurated Fibreware Round Bottom Fire Pails



It can't be used around the stable.
It would be a failure in milking.
The washerwoman wouldn't take it
as a gift.

It is

"FOR FIRE ONLY"

and can only be used as such.
Note the round bottom.

The E. B. EDDY CO.

Limited

HULL = CANADA

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Sept. 3, 1897.

HARDWARE.

THE week has witnessed more activity in many lines of hardware, though the aggregate volume of trade is not appreciably enlarged. Nevertheless, orders for fall delivery are very promising and the outlook for a good turnover is distinctly encouraging. Barb and plain wire manifest a steadier tendency, and enquiry for the latter was rather better. Wire nails also receive more attention and horse nails have been quite active in a small way. Bolts and nuts are sympathetically affected by the stiffness in raw material, though showing no quotable change. Cordage has been in fair enquiry and there has been an active demand for cutlery, carpenters' tools and sleigh bells for fall delivery. Sporting goods also are moving quite freely, and some large contracts have been put through in Belgian cement.

BARBED WIRE—There is a rather firmer feeling in regard to barbed wire, though no quotable change is to report. We quote the basis \$2.25, f.o.b. Montreal.

PLAIN WIRE—Some small orders for plain wire are coming forward, but demand as a rule is quiet. The feeling, however, is firm at 30 and 5 off, f.o.b. Montreal.

WIRE NAILS—The possibility of higher prices in these still causes discussion, and demand shows a gradually expanding tendency. We quote as before, \$1.90 to \$2, f.o.b. Montreal.

CUT NAILS—Orders are coming in with more freedom, but only for moderate quantities. We quote as before, \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is a fair trade doing in horse nails, with discounts steady at 50 per cent.

HORSESHOES—More enquiry is experienced for horseshoes. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Business is quieter in this line. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Trade con-

tinues quiet and discounts unchanged at 12½ per cent.

BOLTS—The stiffening tendency of raw material has given these a firmer tone. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach, 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—The same remarks apply to rivets, and trading in them is fairly active. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There is a moderate enquiry for rope. We quote as follows: Sisal, 7-16 and upwards, 5¾c.; ¾, 6¾c.; 5-16 and ¼, 6¾c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7¾c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS AND CLOTHES WRINGERS—Remain much as last reported, demand ruling quiet.

HARVEST TOOLS—Very little doing.

SPADES AND SHOVELS—In moderate enquiry, draining tools receiving the chief call.

FILES—Continue the same. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

CARPENTERS' TOOLS—Assortments of

these are contained in most of the orders now going out.

BUILDING PAPER—Business of a quiet character. We quote 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

LEATHER BELTING—Demand moderate, and values unchanged.

WARE—There is a steady enquiry for tin, enamel and plain iron ware.

HINGES—Jobbers report a continued demand for barn door, strap hinges, etc. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—Fall orders continue heavy for both table and pocket cutlery, and it looks as though the turn-over this season will be largely increased.

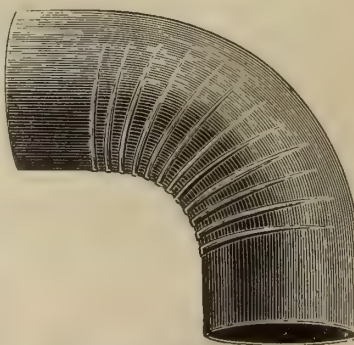
SLEIGH BELLS—Orders keep coming in freely from Quebec, Ontario and the Northwest for these.

SPORTING GOODS—Demand is, if anything, more active for guns, rifles and ammunition.

SHOT—The feeling in shot is firm and demand good. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

CEMENT—There is an easier feeling in Belgian cement, which sold this week at \$1.85 to \$1.95. A large contract was put through at the inside price, partly for prompt and partly for future delivery.

ELBOWS . . .



Do not place your orders for elbows thinking we cannot supply as cheaply as others. We are in a position to sell any style of elbow at the same prices as others, and . . .

We Will Guarantee Prices

3 Styles { 1 Piece, Heavy, 5, 6 and 7 inch.
1 " Light, 6 " 7 "
4 Pieces, Heavy, 5, 6 " 7 "

The McClary Manufacturing Co.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington Street, MONTREAL

BRILLIANT

FRENCH

PLATE GLASS

THE BEST AND PRICES THE LOWEST

AT THE

Consolidated Plate Glass Co.

of Canada (Limited)

TORONTO, MONTREAL, LONDON, OTTAWA



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman Sporting Goods Co. 403 St. Paul St. MONTREAL

FIREBRICKS—In fair demand and steady at \$16 to \$21 per 1,000, as to brand.

METALS.

Demand for all kinds of metals is steadily improving and a more active trade is doing. The tone of this market is firm, especially for lead and copper, and prices have an upward tendency. In sympathy with the advance in the States of 10 per cent. values on iron pipe have scored another rise locally.

PIG IRON—Demand is of a moderate nature, but some fair orders have been put through lately. We quote: No 1 Hamilton, \$15.50 to \$16; No. 2, \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrshire, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—Business in bar iron is fair and values rule steady at \$1.35 to \$1.40.

BAND IRON—Quiet and steady at \$1.65.

HOOP IRON—Stocks are light and prices hold steady at \$2.25.

SHEET STEEL—There is no quotable change, but values may advance shortly. We quote the basis \$2.35.

SHEET IRON—In fair enquiry, and medium sizes are rather scarce. The base price is unchanged at \$2.25.

GALVANIZED IRON—Enquiry for galvanized iron, both from stock and for importation, has been quite active, and there has been some difficulty in filling orders for certain sizes. We quote: "Queen's Head" and "Morewood," \$4.25 to \$4.30.

TINNED IRON—In better enquiry, with prices steady at \$5.50 up to 20 gauge.

LEAD PIPE—Has a firmer tendency, while demand is improved. We quote 7 to 7 1/2 c., with 30 and 5 off.

PIG LEAD—Advices all report increased firmness abroad, and though no quotable change is reported here prices have an upward tendency. We quote \$3.60 to \$3.75.

INGOT TIN—Steady under a fair demand at 16 to 16 1/2 c.

INGOT COPPER—This metal is pointing higher, while enquiry has been fairly active. We quote 12 to 12 1/2 c.

SHEET COPPER—Continues steady. We quote: Sheathing copper, 14 1/2 to 16 c. according to weight and quantity; braziers', 15 1/2 to 17 1/2 c. per lb. according to gauge.

IRON PIPE—Further advance has been established in both black and galvanized pipe as a result of the 10 per cent. advance in the States. We quote: Black pipe, 1/8-inch, \$2.50; 1/4 to 3/8-inch, \$1.85; 1/2-inch, \$2.35; 3/4-inch, \$2.84; 1-inch, \$3.91; 1 1/4-inch, \$5.15; 1 1/2-inch, \$6.66; 2-inch, \$8.97. Galvanized pipe, 1/4-inch and 3/8-inch, \$3.10; 1/2-inch, \$3.90; 3/4-inch, \$4.72; 1-inch, \$6.55; 1 1/4-inch, \$8.98; 1 1/2-inch, \$11.45; 2-inch, \$15.57.

CANADA PLATES—The demand for Canada plate has continued active and orders in many cases are filled with difficulty. We quote \$2.25 to \$2.30.

TIN PLATES—There is a good demand for these, and many jobbers are evidently out of stock, for brokers have been scouring the market here for the more standard sizes. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25;

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

— MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

If you want the straightest and most durable Rawhide Whips in the market, order our

Napoleon and Monarch

WHIPS

Every Whip Guaranteed.

Patented and made only by . . .

HAMILTON WHIP CO.

119, 121, 123 Mary St., HAMILTON.

Cheap Whips of Every Style.

do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do. I. X., \$4.50.

TERNE PLATES—The same remarks apply to ternes, stocks of which continue light, and the basis is firmly held at \$6.25.

BOILER PLATE—Unchanged at \$1.90 to \$2.

SOLDER—Quiet and steady at 12c.

SPELTER—Firmly held at \$4.75.

ANTIMONY—Unchanged at 9½ to 10c.

SHEET ZINC—Demand fair and prices steady at 5¼ to 5½c.

SCRAP IRON—Continues quiet at \$12 for No. 1, and \$6 to \$7 for No. 2.

PAINTS, OILS, ETC.

There is no improvement to report in the condition of business in this department, the trade doing being of a sorting order, but makers are hopeful of having a good fall trade. The season of exhibitions is never favorable to this branch of business. The firmness in lead continues. Linseed oil has advanced 1c. within the week. Turpentine is without change.

WHITE LEAD—Quiet. We quote: Government standard, \$5.25; No. 1, \$4.87½; No. 2, \$4.50; dry white, \$4.50.

RED LEAD—In fair demand. Genuine in casks, 4¼c.; kegs, 4½c., and No. 1, ¼c. less.

LIQUID PAINTS—Without change.

PARIS GREEN—Business over for the season.

LINSEED OIL—Has increased in firmness in England. Locally, the price has been advanced 1c., and we now quote: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Unchanged. Single barrels, 43c.; 5-barrel lots, 42c.

VARNISHES—In fair demand at scheduled prices.

OILS—Round lots of steam-refined seal oil are now held at 41½c., and stocks here are small. Gaspe cod oil is higher at 31 to 32c., and Newfoundland at 33 to 35c.

NAVAL STORES—Quiet, with values firm. We quote: Resins, \$2.85 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

Enquiry for glass is widening, and the market has a distinctly firmer tendency, though no quotable change is to report.

We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Without change. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

There is an improved demand for heavy chemicals for forward delivery. Prices generally are steady. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

The hide market is steady. Beef hides move at 8c. for No. 1, 7c. for No. 2 and 6c. for No. 3. Lambskins are 10c. higher at 45c. each.

PETROLEUM.

Canadian refined has advanced ½c. to 13½c. for car lots and 14½c. for smaller quantities.

COAL.

Unchanged. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

TRADE NOTES.

Canadian petroleum has been marked up ½c. per gallon on both round and small lots.

Gaspe cod oil has advanced to 31 to 32c., and steam refined seal is held firmer at 41½c.

Linseed oil has been advanced 1c. here in consequence of the continued firmness abroad.

Cables from abroad this week report continued firmness in lead and copper, with an upward tendency to values.

Values on black and galvanized pipe have been marked up all round as a result of the 10 per cent. advance in the States.

ONTARIO MARKETS.

TORONTO, Sept. 3, 1897.

HARDWARE.

It cannot be said that trade has been quite so good as it was last week. This could have been partly anticipated, as quite a number of travelers are in their houses waiting to meet their customers who will visit the Exhibition. Next week, too, sales will be light, for, as a general rule, dealers say that not many orders are made during the Fair time. Inspection, only, occurs. The outlook for a good fall trade seems to be universally bright. In connection with plumbers' supplies, trade is steady. The list of steel-clad baths has been revised and lowered, while the discount remains the same as heretofore. The fall trade in the way of tinsmiths' supplies has started and goods of this description are going out freely. In such lines as stove boards, elbows, stove pipes, etc., quite a trade is being done. A number of retailers have visited Toronto this week, but the greater number arrive during the second week.

BARB WIRE—There is a slight improvement in trade in this line, but all orders are for small quantities. The advanced prices seem to be holding firmly. We quote: \$2.25 f.o.b. Toronto, Hamilton, Montreal and London. Terms, 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—There is really nothing doing, the only call being for hay-baling wire. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—The usual amount of business is being done in ordinary twine wire, and ordinary trade only is going on in coppered tin. Discount, 30 per cent.

WIRE NAILS—No further improvement of any account has been experienced. Orders are few and far between, although enquires are coming in for prices on quantities. When quoting freight, classification must always be consulted. The ruling idea as to base price is \$2.04 Toronto, Hamilton, London,

Horse Shoes, "M" Brand, 1897

IRON SHOES

"Light" Pattern in Nos. 0 to 7
"Medium" Pattern in Nos. 1 to 7
"Snow Shoes" in Nos. 1 to 6

— WE MAKE —

X.L. STEEL SHOES

made only by us under registered trade
"New Light" Pattern in Nos. 1 to 5
"Extra Light" Pattern in Nos. 0 to 4



mark.

TOE WEIGHT STEEL SHOES, all forward in Nos. 1 to 4.

MONTREAL ROLLING MILLS CO., Montreal

N.B.—To distinguish our Shoes, please note, (1) all our Shoes are stamped "M." (2) All our Kegs are branded on side of keg "M Brand 1897."

We are the sole manufacturers in Canada of "X.L." Steel and Toe Weight Steel Horse Shoes.

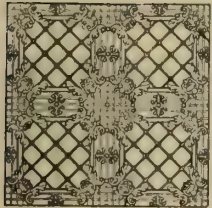
The "Hayes" Patent Metal Lath

Just the
thing for
Pipe Chases

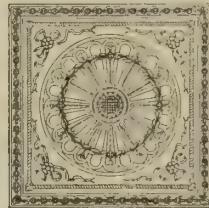


Just the
thing for
Pipe Chases

Used in many of the most important buildings in the Dominion and United States.



**EMBOSSSED
METALLIC
CEILING**



We illustrate herewith three of our designs. You should handle these goods. They are rapidly superseding Lath and Plaster.



The METALLIC ROOFING CO. Limited

WRITE FOR QUOTATIONS.

MANUFACTURERS.

1170 King St. West ... **Toronto.**

and where the freight from Pittsburg does not exceed 21c. in less than carload lots.

CUT NAILS—The condition of trade has not changed much. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is still good, with prices unchanged. Discount, 50 per cent.

HORSESHOES—Are moving quite freely. A fair number of orders are being received. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—No improvement in trade has been experienced this week; a fair number of orders have been received. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

▲ **BRASS AND COPPER WIRE**—Trade is about the same; it remains slow. Discounts are 12½ per cent.

BOLTS—Although trade has been dropping off considerably business yet has a healthy tone. Discounts are as follows: Common bolts, 3-16, ¼, ⅜ and 5-16, 70 per cent.; ditto, ⅜, 70

per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ⅜ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—The tinned and coppered varieties are being still called for freely and trade in all of these lines is quite brisk. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Trade is good. Discounts are 17½ per cent.

ROPE—As a whole, the demand in this line is not at all brisk. However, some lines, such as are used for plough line, etc., are being called for to some extent. We quote: Sisal, 7-16 in. and larger, 5½c.; ⅜ in., 5½c.; ¼ and 5-16 in., 6½c.; 3-16 in., 7½c. Manilla, 7-16 in. and larger, 7½c.; ⅜ in., 7½c.; ¼ and 5-16

in., 8½c.; 3-16 in., 8½c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—The trade in barrel churns is quiet, but dash churns are in better demand. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Business is exceptionally quiet just now. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—The season is now over. The only articles classified under this heading for which there is any demand are lathes, corn-knives, corn-hooks and vegetable scoops. Discounts are 60 and 10 per cent.

SPADES AND SHOVELS—Trade is inclined to be quiet. Draining tools are in slightly better demand. Discount, 45 and 2½ per cent.

BUILDING PAPER—The improvement noted last week continues. There is an increased demand for roofing felt. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—An improvement in trade has been felt during the last few weeks. This is the time for changes. We quote: Standard, 55 per cent.; extra, 40,

10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—There is a steady demand for granite and tinware. Orders are not so large, however, as they have been. A change has been made in the list and discount of stamped ware. Discount now is 80 and 10 per cent. where formerly it was 80 only.

HINGES—Jobbers report a good trade. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CUTLERY—Prices remain about the same. The demand, however, has shown a slight improvement.

SPORTING GOODS—Trade is quite good. General lines are being called for daily.

POULTRY NETTING—Nothing doing. Discount, 67½ per cent.

GREEN WIRE CLOTH—Now quiet and featureless. We quote: \$1.35 per 100 square feet.

GARDEN HOSE—There are not many enquiries for garden hose. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—The volume of business doing is very satisfactory, although no very large orders are being filled here. We quote in barrel lots as follows: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The trade in nearly all lines of metals has been very satisfactory; in some lines the demand has been so heavy that stocks are well nigh exhausted and shipments are being eagerly awaited. The advanced prices are firm.

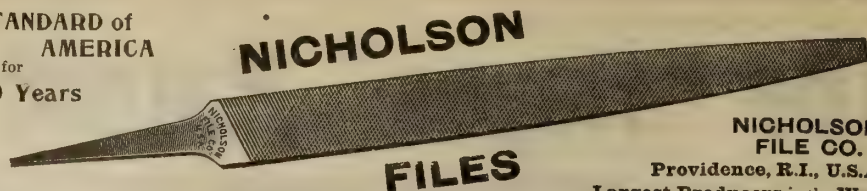
PIG IRON—Trade remains in about the same condition as it was a week ago. The scarcity of labor keeps the price high in the United States and the Canadian furnaces have not been compelled to follow suit in this regard. We quote as follows: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16.50 for No. 1, and \$16.15 for No. 2; Southern foundry, \$16.75 for No. 1; \$16.25 for No. 2, and \$16 for No. 3; Niagara, No. 1, \$15.80; No. 2, \$15.30.

BAR IRON—A slow trade is noticed here. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—Business in this line is very unhealthy. We quote \$2.20 per 100 lbs.

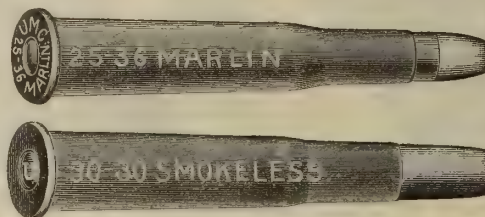
SHEET STEEL—The improvement noted last week has been well maintained. Stocks are inclined to be somewhat low. We

STANDARD of
AMERICA
for
30 Years



**NICHOLSON
FILE CO.**
Providence, R.I., U.S.A.
Largest Producers in the World

The Marlin Model 1893



in addition to being made for the 32-40 and 38-55 cartridges, is made of special steel to take our high power cartridges, the 25-36 and 30-30 smokeless.

The 25-36 has a 117 grain metal patched bullet with soft lead point, smokeless powder, or a 106 grain metal patched bullet with soft lead point, black powder.

The 30-30 has a 160 grain bullet, either full metal cased or metal patched, with soft lead point, smokeless powder.

If you desire, you can reload the ammunition to suit your purposes, using black powder and a lead bullet with a proper alloy of tin. Cartridges are also ready with light loads for gallery and short range.

Made
in all Styles.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.



**SELLS
ON
SIGHT**

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc. Catalog free.

PIKE STATION, N.H.

Binder Twine. HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

TWINES

quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—The demand is just as brisk as it was last week, and covers as wide a range. Business is very healthy. Stocks are low. We quote: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The demand has been exceptionally heavy, in consequence of which stocks are low. Some large ship-

ments are being eagerly looked for at the beginning of next week, both from England and United States. The lighter gauges especially are urgently wanted. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅛ to ¼c. per lb. higher than figures named.

TINNED IRON—Quiet and featureless. We quote as follows: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut

sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{7}{8}$ to $7\frac{3}{8}$ c. per lb.

LEAD PIPE AND TRAPS—Trade is not so good. Only small quantities are moving. No complaints have been heard in regard to the change in price; it seems to be holding. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, 30 per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—Business is only fair. Discount is 60 and 10 per cent.

PIG LEAD—Business has been a great deal better. Prices are firm. We quote ton lots at $3\frac{1}{2}$ c. per lb., and in smaller quantities at $3\frac{3}{8}$ c. per lb.

INGOT TIN—Trade here is also better, with no change in price. Prices are $16\frac{1}{4}$ to $16\frac{1}{2}$ c.

INGOT COPPER—Trade is very slow. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER—A few nice orders have been received this week. Prices are remaining firm. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Enquiries for prices are coming in freely, but shipments have only been small this week. Prices are still unsettled, and quotations given are sub-

ject to immediate acceptance only. We quote now: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, $1\frac{1}{4}$ c.; $\frac{1}{2}$ inch, \$2.20 to \$2.25; $\frac{3}{4}$ inch, \$2.65 to \$2.70; 1 inch, \$3.60 to \$3.65; $1\frac{1}{4}$ inch, \$4.85 to \$4.95; $1\frac{1}{2}$ inch, \$6.20 to \$6.30; 2 inch, \$8.35 to \$8.50; galvanized, discount 60 per cent.

RANGE BOILERS—There are no remarkable features to note this week. We quote as follows: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—The season now being on, shipments are quite numerous and of fair dimensions. Most of the import orders have reached their destinations throughout the country, and city dealers are now being supplied. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—A nice amount of business has been done during the past week, principally in better quality. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Remains steady. We quote: $\frac{1}{4}$ in., $4\frac{5}{8}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—The demand keeps steady

with no improvement. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

TERNE PLATES—Are still in fair demand at unchanged prices. We quote: I C, \$6.25 to \$6.50; I X, \$8.

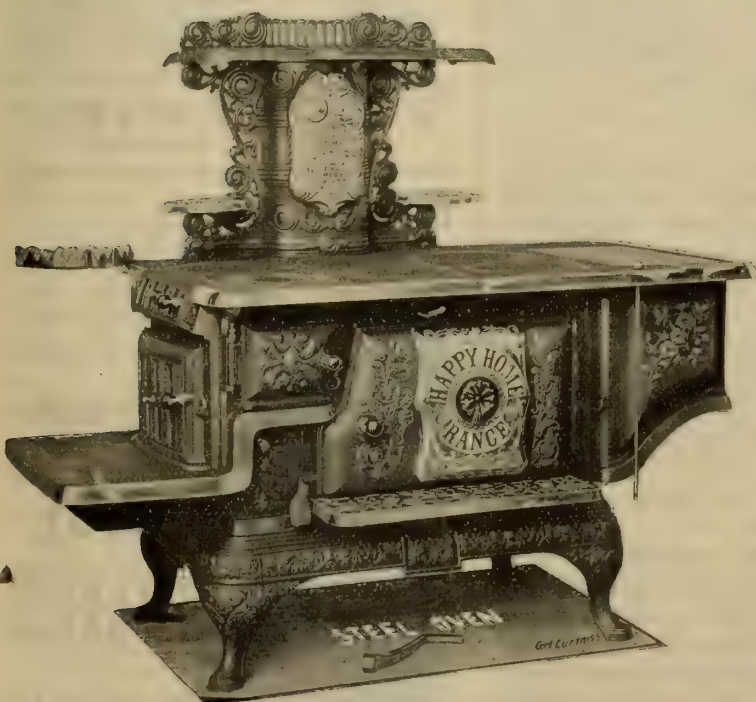
SOLDER—A fair number of orders have been received this week, which is one of the busy weeks for this metal. We quote: Standard, $10\frac{1}{2}$ c.; strictly pure, 11c.

ANTIMONY—Nothing special can be said. Orders are few. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

OLD MATERIAL

Dealers in old material say that if they now had to depend on the iron trade they would soon be out of business. There is nothing doing. In the other lines trade is at least interesting on account of the recent changes in the tariff. Rags are finding their level and promise to be in good demand. The foreign markets of the finer metals remain unsteady. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead,

Moore's "HAPPY HOME RANGE"



~ 1897 ~

Nothing

will increase your business more or make your success more permanent than to

Satisfy your Customers

You can sell the "Happy Home Range" with every assurance that your customer will be thoroughly satisfied.

"THE HAPPY HOME"

possesses many features of utility and convenience not found in other ranges.

IT IS up to date,
a beauty in appearance,
economical on fuel,
perfect in operation,
made in all desirable styles
and sizes.

SAMPLE ORDERS SOLICITED.

Mfd. by... THE D. MOORE CO. Limited - HAMILTON, CAN.

2c.; zinc, 2c; scrap rubber, 3 to 3 1/4c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c per 100 lbs.

GLASS.

At present the trade in glass is one of the principal features of the hardware trade. Trading is much about the same as it was a week ago in spite of the preventives of the Exhibition; all travelers are in. The chief line that is selling is the double diamond, although fancy as well as sheet is receiving attention. Prices are unchanged. The Belgian market is firm. It is reasonably certain that lower prices in glass will not be quoted this fall. We quote as follows: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

Since the travelers have come in to receive their customers at the Exhibition orders have been smaller and less numerous. However, some nice shipments have been made this week. Varnishes are selling freely. Red lead is moving, and, considering the season of the year, a brisk trade is being done in white lead. Dry colors are also active; in fact, general trade might be called good. Collections are fair. The demand for linseed oil fell off a few points. The English market moved up a few notches during the last few days. Turpentine is slow. Southern quotations went higher on Wednesday, and prices in Toronto were advanced 1c.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.35; No. 1, \$4.97 1/2; No. 2, \$4.60; No. 3, \$4.22 1/2; No. 4, \$3.85; dry white lead in casks, \$4.70.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.25; ditto, No. 1, in casks of 560 lbs., \$4; genuine, in kegs of 100 lbs., \$4.50; ditto, in kegs of 100 lbs., No. 1, \$4.25.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—28c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10c. per lb. and 11c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders

in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12 1/2-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 44c.; boiled, 1 to 4 barrels, 47c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 45c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—There has been no noticeable improvement during the week. Business continues dull. Cowhides: Dealers pay 8 1/2c. for No. 1, 7 1/2c. for No. 2 and 6 1/2c. for No. 3. Steerhides: 60 lbs. and up, 8 1/2c. for No. 1, 7 1/2c. for No. 2 and 6 1/2c. for No. 3.

CALFSKINS—Trade is fair and shows no change. We quote; No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 55 to 60c.

WOOL—The demand from local factories is increasing slightly and is giving a better feeling to the market. The quantity of wool in the country is increasing; in fact, from the natural course of events an improvement in the condition of affairs cannot long be postponed. Dealers are still paying 19 to 20c.

PETROLEUM, ETC.

The demand is fair and improving slightly. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14 1/2c.; carbon, safety, 16 1/2c.; Canadian water white, 17c.; American water white, 17 1/2c.; Pratt's astral, 17c. in bulk.

COAL.

Business is much about the same as it was a week ago. There is more going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Turpentine has advanced 1c. a gallon.

Prices of iron pipe are still unsettled. Quotations remain withdrawn.

The Steel-Clad Bath Co. have revised their list and left the discount the same as before.

M. & L. Samuel, Benjamin & Co. are sole agents for the celebrated Morgan's crucibles, made after American pattern. They carry a full range of sizes, and as these cannot be excelled, they expect to receive numerous sample orders and enquiries for prices.

The McClary Manufacturing Co., Limited, London, are not exhibiting at the

DOMINION FLINT PAPER CO.

Hamilton, Ont.

Supplying the Canadian demand with Improved Paper to sand paper the whole Dominion.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

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Telephone 689.
Cable "LeVesconte" Toronto.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

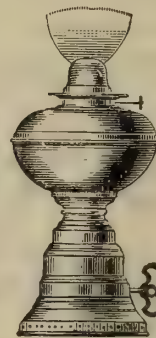
HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.



Tandem
Anti-Friction
--- Metal

LAMPLOUGH
& McNAUGHTON
MONTREAL.



WANZER.

Improved Wanzer Lamp

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER LAMP & MFG CO.
HAMILTON.

THE OAKVILLE BASKET CO.,



Manufacturers of

1, 2, 3 Bushel

Grain

AND

Root

BASKETS

THE OAKVILLE
BASKET CO.

A QUARTER OF A CENTURY

Is a long period for the supremacy of a brand of horse nails to have been maintained. The "C" brand, made by the Canada Horse Nail Company, has never been beaten in the contest for first place by our competitors. The only Gold Medal ever awarded in Canada for horse nails was granted to us in competition with the world. Such a record has not been obtained without good cause and merit.

Temporary success is comparatively easy to obtain; but for a manufacturer of horse nails to maintain the popularity of his brand year after year, as we have done since 1865, and over such a widely extended area as is comprised within the limits of the Dominion, from the Atlantic to the Pacific, such a record must have a more permanent basis than mere passing fancy. The "C" brand nails, when used, tell their own story: they represent the perfection of horse nail production. The basis of a good nail is good material. We use the best Swedish (Norway) charcoal iron rolled nail rods exclusively, which is the best known material for the purpose.

Our nails are all hot-forged from the rods, as in the old-fashioned hand hammered process, but with greater uniformity. The pointing and finishing processes are done by machinery used exclusively by our company. All our nails are carefully hand-picked, and we claim that not a single imperfect nail is to be found in a box bearing our name and brand. They are the most economical to buy and use, because they are the best. They are the same price as other good brands—and should be obtained from wholesale dealers on our terms plus freight.

In ordering specify for the "C" brand, made by

THE CANADA HORSE NAIL COMPANY, MONTREAL

Toronto Fair this year, being over-pressed with orders in all lines, but they will be pleased to see any of their customers and friends at their warerooms, 49 Front street west, Toronto.

MANITOBA MARKETS.

WINNIPEG, Sept. 2, 1897.

Trade in all lines of building material is brisk. Harvest is now well advanced, three-fourths of the crop being cut and stocked. Already threshing gangs are being got together, machinery overhauled and preparations made to thresh at once. Operations will begin next week. The present price of wheat is an inducement to get the grain on the market speedily. Duck shooting commences on Wednesday and guns are being furbished and new ones being bought; in fact, the gun trade is very brisk just now.

AMMUNITION—The demand is brisk. Shot, ordinary, \$5.50 per 100 lbs.; chilled ditto, \$6; loaded shells, 12-gauge, Eley's, \$14; N.M.C. and Winchester, \$16.20; Robin Hood, \$18.

BARBED WIRE—Small lots are still going out and will continue to do so for another month. The price is \$2.60; twisted wire and staples, \$2.75.

CUT AND WIRE NAILS—Are in good demand. Cut nails, \$2.50, base; wire nails, \$2.65.

HARVEST TOOLS—Business is small and there is no feature of importance to report.

BOLTS—Bolts are always in steady demand in this market.

LEATHER BELTING—Is in good demand for threshing machines. Prices are as follows: Agricultural, 65 per cent. discount; standard, 45 per cent.; extra, 40 per cent. Rubber belting, 60 and 10 per cent.

BAR IRON—Trade is steady and demand good. Price, \$2.10.

LINSEED OIL—Still holds the advance of last week. Raw, 53c. per gal.; boiled, 56c. for barrel lots.

UNITED STATES MARKETS.

NEW YORK, Sept. 3, 1897.

PIG TIN—Dealings were fair in volume, but almost wholly of ordinary character, with only prompt and near future deliveries involved. The arrivals were moderate, however, and the stocks on hand and in transit seem to be well taken care of. In any event, sales could not have been put through easily, although some speculative interests endeavored to give the surface of the market a weak appearance. About 13.75c. ex store and 13.80 13.85c. f. o. b. were named as being inside prices at the close.

COPPER—The recent reports of large sales by one or more of the prominent Lake Superior producers were confirmed in good part as not unusual; the quantity involved is somewhat in doubt, but that it reaches 15,000,000 lbs. or more is probable. The dealings were mostly at about 11 1/4c. Other varieties are selling fairly, and may be quoted at 11 1/4c. for electrolytic and 11c. for ordinary casting stock.

PIG LEAD—Business is on a somewhat smaller scale, with less speculative interest, but the purchases recently made by consumers and dealers serve to give the market decidedly firm undertone. At the close 4.20c. to 4.25c. was quoted, with few sellers below the inside rate. London cables were firm, quoting £13 2s. 6d. for soft Spanish.

ST. LOUIS, Aug. 31.—Pig lead firm at 4.00 to 4.02 1/4c. for soft Missouri.

STEEL RAILS FOR INDIA.

In the British House of Commons a few days ago, Mr. Cayzer asked the Secretary of State for India whether he was aware that the East Indian Railway Co., whose railway was built by British capital, under Government guarantee, and of which the Government were now the owners by purchase, had recently purchased 7,708 tons of steel rails and fishplates from the Maryland Steel Co., and that the same were to be shipped from America to Calcutta, the tender of the Maryland company being nearly £1 per ton lower than any British tender; and whether some of the other Indian guarantee railways made it a condition of these tenders that the goods should be of British manufacture; and, if so, why the East Indian Railway Co., a Government-owned railway, could not also do so. Lord George Hamilton in reply said it had been the practice of the India Office to give the preference to British manufactures provided the difference in price and quality is not great. In this case he was informed that the tender accepted by the Board of the East India Railway Co. appeared to be in all respects a satisfactory one as regards quality, and that by accepting in its place the lowest tenders of a British firm they would have incurred an additional charge of £8,675. The tender of the Maryland company was £34,000, while the lowest British tender was £42,500, and he was informed that the qualities were equal.

A representative of the Boss Washing Machine Co., of Cincinnati, Ohio, was in Berlin the other day, and in an interview with some of the business men stated that if circumstances were favorable it was quite probable that the company would locate there in the near future.

Plumber and Steam-Fitter

SOME BEAUTIFUL BATH ROOMS.

The finest bath room in New York, says The Plumbers' Trade Journal, is that of Mrs. Cornelius Vanderbilt. Here is the most beautiful of the fifteen bathrooms in the Vanderbilt house at Fifth avenue and Fifty-seventh street. The room itself is about twelve by sixteen feet, and is absolutely perfect in appointment. The chief object of beauty in the furnishing is the tub. This tub is about five feet in length, and is cut from a solid piece of pure white Carrara marble. The interior is beautifully polished and the exterior is elaborately carved. The whole thing was made in Italy, and brought to this country at an expense which can only be guessed at by people who are not in the habit of bringing home marble masterpieces of sculpture for their bath tubs. The tub rests on carved marble supports. The floor is paved with white tiles, and the walls to the height of four or five feet are wainscotted with white tiles exquisitely decorated in gold. The remainder of the wall space is covered with mirrors, and a unique feature of the room is the ceiling, which is also formed of mirrors.

Henry Marquand's house has been famous for its beautiful bathrooms, and at the time of Whitelaw Reid's nomination for vice-president a great deal was written about the silver-plated plumbing in his country place at Ophir Farm. The fact is that the bathrooms there, while they are finely appointed, have been eclipsed by a great many others, about which nothing has ever been heard.

PLUMBING CONTRACTS.

Purdy, Mansell & Mashinter, Toronto, have the contract for the hot water heating of the gaol at North Bay, Ont.

The Bennett & Wright Co. of Toronto, Limited, have the contract of putting in a pipe communication to be worked by the vacuum system in the new building of The Hamilton Spectator. It is to be quite extensive. They have also been putting in automatic sprinkler mains for the Toronto Gutta Percha and Rubber Co.

The Hamilton City Council have awarded the following contracts for the construction of the new sewage disposal works: Carpentering, R. & J. Boag, \$1,639;

masonry, G. F. Webb, \$5,699; plumbing, Fairly & Stewart, \$288; steam heating, Fairly & Stewart, \$345; boilers, R. Quinn, \$1,050; roofing, J. E. Riddell, \$897; painting, D. Kemp, \$198; elevator, Leitch & Turnbull, \$475; wiring, Lovell & Farrell, \$130.

John Watson & Co., Montreal, have received the contract for the plumbing, heating and ventilating of three stores for F. Fairman.

REPAIRING WATER MAINS.

A new idea in checking the flow of water from a broken water main was exhibited the other day in Washington, D.C., by Wm. Koch, a prominent master plumber of the District of Columbia, according to an exchange. The street had just been torn up by workmen who were excavating to lay the wires of the Potomac Electric Light and Power Co., and one of the laborers in digging struck a pipe, piercing it to such an extent as to cause quite a flow of water from the hole.

Hitherto it has been found necessary to dig up the street in order to remedy such a break, and as the water inundates the trench, this method is very unsatisfactory.

Mr. Koch's method was very speedy and efficacious. An ordinary soap box was placed underneath the leak, holes being cut into both ends so as to allow the pipe to settle half way. Then pieces of ice, coarse salt, ammonia and ether were placed in the box and packed tightly around the pipe.

In a short while a plug of ice was formed, which checked the flow of water from the

street, leaving the plumber free to saw off the ruined portion of the pipe and join on a new piece. The entire operation did not consume over twenty minutes.

FATHER GOOSE PLUMBERS' BICYCLE RHYMES.

Tom, Tom, the plumber's son,
He stole a wheel and away he run;
But a copper fleet
Young Tom could beat
And they locked him up in Mulberry street.

Jack Sprat's
Trousers would flap;
His wife, she made her's tight,
And so between the two, you see,
They kept the average right.

Peter, Peter, pumpkin eater,
Had a wife, and couldn't keep her,
Took an axe and smashed her bike,
So she had to stay at home at night.

Hey-didd'e-diddle,
The bicycle riddle,
The strangest part of the deal;
Just keep your accounts
And add the amounts;
The "sundries" cost more than the wheel.
—Exchange.

PLUMBING NOTES.

Knox Bros. are commencing a plumbing business in Ottawa.

Maud M. Wood, wife of Alfred T. State, is registered proprietress of the plumbing business of A. T. State & Co., Montreal.

At 11 o'clock Wednesday morning a dark-complexioned man speaking broken English went into John Wright's plumbing shop, 403 Yonge street, Toronto, and purchased a large hanging lamp. In payment he first offered a \$50 bill and then a \$20 bill. When the customer had departed, Wright found that his change was \$10 short.

ARMSTRONG MAN'F'G. CO.



AWARDED TO
Armstrong
MANUFACTURING CO.
For Best Adjustable
Pump and Bolts
Chicago, 1893



CATALOGUES ON APPLICATION.



INTERNATIONAL COTTON EXPOSITION
ATLANTA GA 1891

**WATER GAS
AND**

BRIDGEPORT, CONN.

**STEAM FITTERS
TOOLS**

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

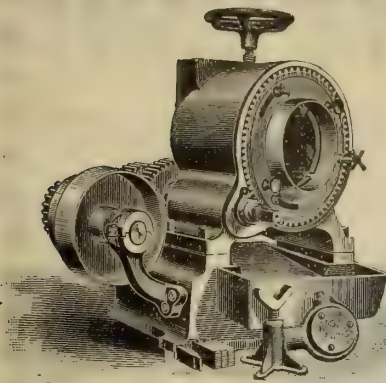
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

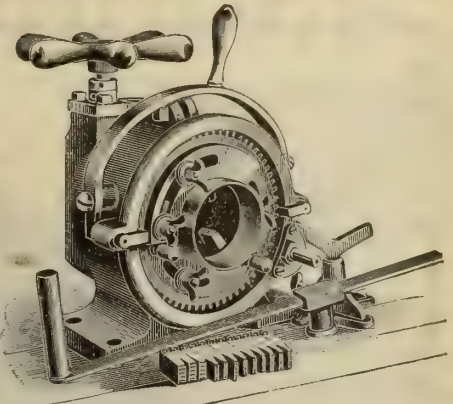
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



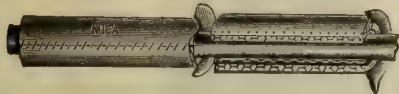
No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.
Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

**SMALL
RUBBER
GOODS**

BOILER GASKETS

**MOULDED
RUBBER
GOODS**

H.O. CANFIELD - BRIDGEPORT, CT.

BRASS GOODS

... FOR ...

Steam-Fitters, Plumbers, etc.

Made only by the very best makers.

Full line carried in stock. Low prices. Prices quoted on application.

MECHANICS SUPPLY CO., 96 St. Peter St., QUEBEC

SANITATION AMONG THE ANCIENT ROMANS.

In such populous places as Rome and Pompeii some attempt at scientific sanitation was made in the establishment of sewage disposal by covered systems, the remains of which are to be seen in the former city in working order to-day, says an exchange. So long ago as 550 years before the birth of Christ, Tarquinius Lucius the elder, the fifth king of Rome, caused a huge drain to be constructed for the primary purpose of draining the marshy parts of that ancient city, but which was made, very soon after its construction, to also serve the functions

of a sewer, which it still performs for certain parts of modern Rome. This drain received the name of Cloaca Maxima, which name it still bears. It was constructed of three concentric rows of huge stones joined together without mortar or cement, and its interior diameter measures about 13 feet. It would appear as if it were more oval than circular in shape, and it may therefore be taken as the primitive type of the oval sewer of modern sanitation. One of the most interesting discoveries, from the sanitary point of view, made in the Pompeian excavations, and one which throws much light on the habits of the better classes of that city, was the unearthing of the Pom-

peian water closet, the arrangements of which showed that water was used for flushing, probably, however, by hand.

STEEL CLAD BATHS IN MEXICO.

Mr. E. E. Sheppard, Canada's special commissioner to Mexico, in his report to the Minister of Trade and Commerce says; "The Canadian steel clad baths have been introduced into Mexico by a Canadian firm, who are represented in Mexico by the most prominent plumbing concern in the Republic—Scotchmen. The goods received have been found to be salable and satisfactory."



Always striving to please, we have made an improvement even on our '96 make of Horse Shoes and beg to offer this season our 1897 model, a photographic reproduction of which appears above. The old reliable "Blue Hoop" Shoes will be found perfect in every respect. A single trial will convince you of the superiority of our goods.

We make these Shoes in the following patterns:—

Medium Pattern, Iron
Light Pattern, Iron
Snow or Winter Pattern, Iron

Horse Shoers' Own Pattern, Iron
Light Pattern, Steel
Featherweight Pattern, Steel

It pays to use the best. Insist on getting "Blue Hoop."

PILLOW & HERSEY MFG. CO. Limited

MONTREAL

From \$15 to \$375.

The idea is prevalent that we do not sell low-priced cash registers. On the contrary, our line embraces registers as low as \$15, ranging from that figure up to \$375.

We study the needs of each individual purchaser and recommend that register which will best suit his business, whether it be the \$15 or the \$375 register.



No. 17 Register—Price \$15.

Registers amounts up to \$1,000.



No. 99 National Cash Register—Price \$375.

Our new total-adding, check and detail-strip printing registers will now:

1. Register and indicate, at one operation, any amount from 1 cent to \$999.99.
2. Add into one total all the sales made during the day.
3. Automatically issue at the same time a paper check, on which is printed the date, consecutive number of the sale, amount of the sale, initial of the clerk who made it, and the proprietor's business card. On the back of the checks the register prints any advertisement desired.
4. Tell how many sales have been made each day.
5. Tell what time your store was opened in the morning.
6. Keep each clerk's sales or the sales in each department separate.
7. Take care in the same way of credit sales, money paid out and money received on account.
8. Print on a strip of paper inside the register, under lock, a complete detailed record of each transaction as it occurs.

With more than 90 kinds and sizes of registers, at as many different prices, we feel sure we can suit the needs of any merchant.

Send a postal card to any of the addresses named below, and one of our salesmen will call and talk the matter over with you. The National Cash Register Company, Dayton, Ohio, U. S. A. Offices in Canada: 6 Rossin Block, King Street, W., Toronto; 1685 Notre Dame Street, Montreal, and Vancouver, British Columbia.

LEWIS BROS. & CO.

Wholesale
Hardware Merchants

— MONTREAL

We are offering Special Low Prices on the following Fall Lines:—

GOODELL'S APPLE PARERS

CATTLE TIES

AXES, AXE HANDLES

CROSS-CUT SAWS

FILES, CHAIN

SCALES, CORDAGE

MEAT CHOPPERS

LANTERNS, GLASS, GUNS

RIFLES and AMMUNITION

Send us Your Orders.

Prompt Shipments.

LEWIS BROS. & CO. - MONTREAL

SOLE CANADIAN AGENTS for S.S. Smokeless Powder.

Send for Gun Catalogue and S.S. Game Register.

Brushes

Catalogue
for
1897
Now Ready

MEAKINS & CO. 313 St. Paul Street . . . MONTREAL
and Meakins & Sons, Hamilton.

PORTLAND

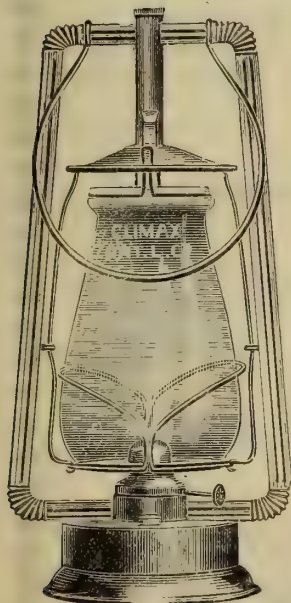
CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks. Lowest Prices
Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

WE MANUFACTURE



Climax Lift
Lanterns
Climax Crank
Lanterns
Climax Tilt
Lanterns
Climax Dash
Reflector
Lanterns
Royal Cold
Blast Lan-
terns. Nos. 1
and 2

Also

Banner Lamp
Burners
Tubular Lan-
tern Burners
Auer Gas
Light Burn-
ers . . .
Angle Lamps
Night Lamps
etc.

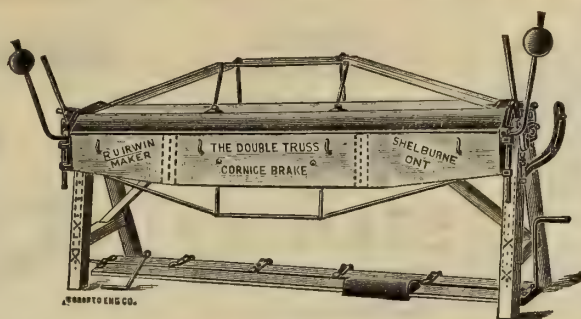
THE ONTARIO LANTERN CO.

Hamilton, Ont.

WALTER GROSE

Sole Selling Agent - - - MONTREAL

Having purchased the Canadian Patent for the "Ingram" Safety Extinguisher for Burners, Lanterns, Oil Stoves, etc., we shall be in a position to supply the same about October 1st. (The best in the world.) Write for particulars.



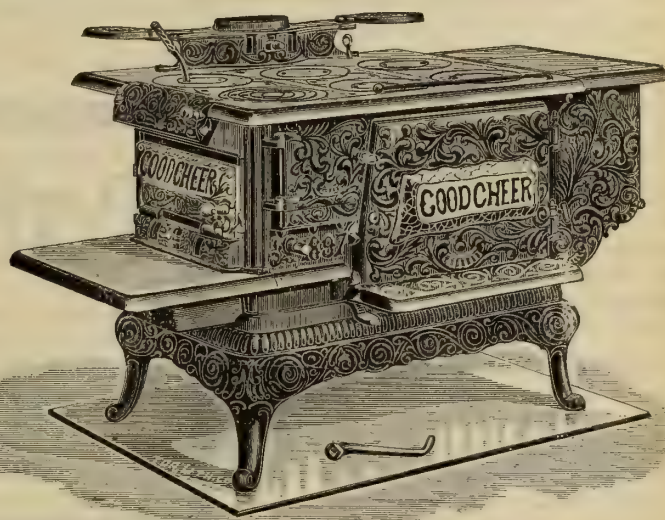
\$50 for an 8-foot Cor-
nice Brake. Bends
20-gauge iron or
lighter, straight and true its
entire length. Sent on trial if
desired. Also 8-foot Beader for
\$12—the handiest made. Send
for circular to

The Double Truss Cornice
Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE
STEEL
OVENS

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

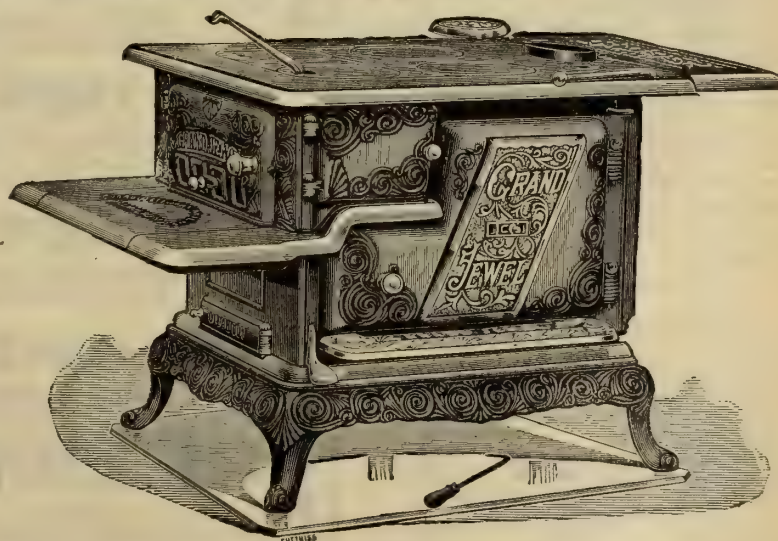
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD
and for COAL.

With
Patent
One-piece
Cold-rolled

SHEET
STEEL
OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and
Western Territories

Merrick, Anderson &
Co.,

WINNIPEG.

Agents for the Province
of Quebec, Nova Scotia
New Brunswick and
Prince Edward Island.

W. L. Haldimand &
Son,
MONTREAL

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

S. S. Dakin, general merchant, Trout Cove, N.S., has suspended.

Stit & Mills, general merchants, Slocan City, B.C., are reported assigned.

Jane Morley, manufacturer of brick, Toronto, has assigned to E. R. C. Clarkson.

John Costigan & Co., coal and wood merchants, Montreal, have compromised.

Elizabeth Potts, general storekeeper, Little Current, Ont., has assigned to T. J. Patton.

Joseph Lapierre, general merchant, St. Antoine, Que., has compromised at 40c. on the dollar.

Tremblay Freres, general merchants, Les Eboulements, Que., are offering to compromise at 40c. on the dollar.

David A. Dunlap, Mattawa, has been appointed curator of the general business of Timmons Bros. & Co., Baie des Peres, Que.

George R. McCarthy, hardware merchant, Smith's Falls, Ont., has assigned to Ogle Carss, Smith's Falls. A meeting of the creditors is to be held on the 8th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

Briggs & Edwards, carpenters, Montreal, have dissolved.

The Boundary Milling and Lumber Co., Greenwood City, B.C., has dissolved.

Nicholls & Ferguson, general merchants, Gorrie, Ont., have dissolved. T. J. Nicholls continues.

Chas. Guilmette & Co., manufacturers of stoves and ranges, Montreal, are about dissolving.

Cross & Hicks, general merchants, Killarney, Man., have dissolved. Cross & Carson continue.

Honorius Corbeil and Albondius Gagnon have formed a partnership in Montreal to trade as wood and coal merchants under the style, Corbeil & Gagnon.

Napoleon Plessis dit Belair, Antoine Collard and Lucien Girard, have formed a partnership in Montreal to trade as roofers under the style of N. P. Belair & Co.

A. H. Falardeau & Co., lumber merchants, Sillery, Que., have dissolved. A new partnership of A. H. Falardeau, D. Falardeau, J. B. Devarennes and Oliver Gignac has been formed to trade under the old style.

SALES MADE AND PENDING.

E. H. Ellis, tinsmith, Gananoque, Ont., has sold out.

The general stock of G. H. Kerr, Lake Megantic, Que., was sold at 59½c. on the dollar.

Walter Milburn, coal and wood merchant, London, has sold out to James C. Allan.

The assets of Cloutier & Frere, general merchants, St. Jacques, Que., were sold at auction Sept. 1.

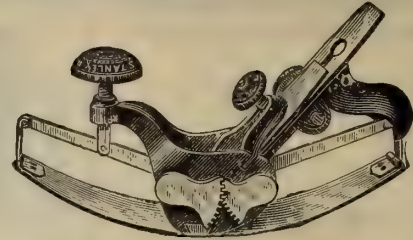
The general stock of the estate of C. W. Deverell, Ravenshoe, Ont., was sold by auction 1st prox.

The general stock of the estate of W. R. Hipwell, Camborne, Ont., is advertised to be sold by auction 8th prox.

**IMPROVED
Labor-Saving
CARPENTERS'
TOOLS.**

**STANLEY
RULE & LEVEL CO.
New Britain, Conn.**

**SOLD BY ALL
Hardware Dealers**

Stanley's Adjustable Circular Plane.

This Plane has a Flexible Steel Face, which can be easily shaped to any required arc, either concave or convex, by turning the Knob on the front of the Plane.

No. 113. Adjustable Circular Plane, 1½ in. Cutter, \$4.00

Perfection

Boeckh's Patent Flat Bridled Brush for Painters combines all the good points of the old twine or wire-bound flat brushes without any of their weaknesses.

Goodness only knows how painters fret and worry over the flat brush that bulges in the centre. It is almost impossible to clean the old-fashioned brush too. Boeckh's Patent Bridle is perfection.

**Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.**

**INSURE YOUR LIFE IN THE
CONFEDERATION LIFE ASSOCIATION**

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only--that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE--TORONTO.

W. C. MACDONALD,
Actuary.

J. K. MACDONALD,
Managing Director.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

J. Lightfoot, tinsmith, London, Ont., has sold out to J. G. Bain.

L. Schofield, blacksmith, Ingersoll, Ont., is giving up business there.

A. O. Brunette, Gananoque, Ont., is commencing a tinware business.

Laurent Hebert, hardware merchant, Montreal, has started business.

The tinware stock of Moses Goldstein, Ottawa, has been sold at 52c. on the dollar.

Kastner & Mock, hardware merchants, Stratford, Ont., have sold out to Duncan L. Myers.

Hunter Bros., bicycle merchants, Hamilton, Ont., have been succeeded by Bain & Sache.

George Spackman, dealer in agricultural implements, Rodney, Ont., has sold out to D. Campbell.

Henry Colcleugh, Cutler, Ont., has advertised his saw mill for sale by auction on September 25.

Jonathan Weir & Son, Moncton, N.B., have restarted their foundry. John P. Weir is manager.

Emile Lionais is now registered proprietor of the business of Lionais & Matthews, electricians, Montreal.

CHANGES.

D. G. Ripley, Westport, Ont., is advertising his grist mill for rent.

G. McIntyre, general merchant, Wingham, Ont., advertises going out of business.

Jane Simpson, general merchant, Waldegar, Ont., has sold out to E. Groskurth.

Reid & Co., general merchants, Neepawa, Man., have sold out to Stevenson & Clair.

H. E. Reed, general merchant, Middleton, N.S., has sold out to Geo. Armstrong.

Charles T. Bailey is reported to be opening out a general store at Qu'Appelle, N.W.T.

Joseph W. Hetherington, general merchant, Lawrence Station, Ont., is removing to Teeterville.

McLaughlin Bros., general merchants, Gorrie, Ont., have been succeeded by Joseph Ferguson.

Robins, Newkirk & Co., general merchants, Port Rowan, Ont., have been succeeded by Newkirk & Co.

DEATHS.

Michel Bovin, joiner, Quebec, is dead.

Charles Giroux, mason, Beauport, Que., is dead.

John A. Doty, lumber merchant, Brigden, Ont., is dead.

Robert Nisbet, manufacturer of printers' rollers, Hamilton, Ont., is dead.

Edward Parris, of E. Parris & Co., general merchants, Slocan City, B.C., is dead.

Patrick O'Toole, of the firm of P. O'Toole & Sons, general merchants, Louisburg, N.S., is dead.

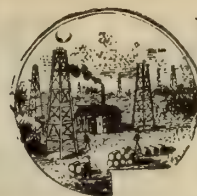
FIRES.

James McNally, cooper, Aylmer, Ont., has been burned out.

Tait Bros., coopers, Duart, Ont., have sustained partial damage by fire.

Davidson & Davidson, Colpoy's Bay, Ont., have had their saw mill burnt.

The machinery of T. Hocking, machinist and die manufacturer, Montreal, has been damaged by water.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for . .

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL

TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works

(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE"
TIRE UPSETTERS
WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL



CURRENT MARKET QUOTATIONS

TORONTO, Sept. 3, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X.,	6 25	
I.X.X.,	7 50	
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Famous—		
I.C.,	5 00	
I.X.,	6 25	
I.X.X.,	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	
I.X.,	4 25	
I.X.X.,	5 00	
I.X.X.,	5 75	
D.C., 12"x17	3 00	
D.X.,	3 75	
D.X.X.,	5 75	

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base ..	3 15	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	8 00	
I.X., Orion	8 00	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs }		
" 14x60, " }		
" 14x65, " }		

Tinned Sheets.		
72x30 up to 24 gauge	0 06	0 06
" 26 "	0 06 1/2	0 06 1/2
" 28 "	0 07 1/4	0 07 1/4

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	1 80	
Band	2 00	
Hoop	2 00	
Swedish	4 00	4 25
Sleigh Shoe Steel	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10 1/2	0 11
Tank Plates, 1-5 and thicker ..	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1 1/2-inch	0 06 1/2	
2 "	0 07 1/2	
2 1/2 "	0 09 1/2	
3 "	0 11	

Steel Boiler Plate.

1/2 inch	2 45	
"	2 35	

3/4 inch and thicker

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 25	2 35
26 "	2 35	2 45
28 "	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 40	
Half polished	2 45	
All bright	2 85	

Iron Pipe.

Wrought, 1/4 to 3/8 inch, 17c; 1/2 inch, 2 1-2 to 2 3/4c; 3/4 inch, 2 65 to 2 70c; 1 inch, 3 60 to 3 65c; 1 1/4 inch, 4 85 to 4 95c; 1 1/2 inch, 6 20 to 6 30c. 2 inch, 8 35 to 8 50.		
Galvanized, 60 per cent.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
16 gauge	Per lb.	
18 to 24 gauge	0 03 1/2	
26 "	0 03 1/2	
28 "	0 04 1/2	

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" 1/4 " " "	4 75	
" 5/16 " " "	4 00	
" 3/8 " " "	3 75	
" 1/2 " " "	3 35	
" 5/8 " " "	3 25	
" 3/4 " " "	2 95	
" 7/8 " " "	2 85	
" 1 " " "	2 75	
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per doz. yards	0 13	0 50
Jack chain, double, per doz. yards	0 15	0 50
Jack chain, brass, single, per doz. yards	0 20	1 00

Copper.

Ingot.		
English B. S., ton lots	0 11 1/2	0 12
Lake Superior		

Bolt or Bar.

Cut lengths, round, 1/2 to 3/4 in. round and square 1 to 2 inches	0 20	0 22
" 1 to 2 inches	0 18	0 19

NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes	0 15	0 16 1/2
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.		
Planished and tinned, 14x48 and 14x60	0 25	0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17	0 19	
" 35 to 45 "	0 15 1/2	0 16 1/2
" 50 lb. and above,	0 15	0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb	0 21	
Spun, per lb	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12 1/2 p.c. off list.		
From 20 gauge up, 12 1/2 p.c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c. off list.		
neats, hard-rolled, 2x4 ft.	0 20	

Zinc Spelter.

Foreign, per lb	0 04 1/2	0 04 3/4
Domestic "	0 03 3/4	0 04

Zinc Sheet.

5 cwt. casks	0 05 1/4	
Part casks	0 05 1/2	

Lead.

Imported Pig, per lb	0 03 1/2	0 03 3/4
Domestic, per lb	0 02 3/4	0 03
Bar, 1 lb.	0 04 1/2	0 04 3/4
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2		0 04 3/4
Sheets, 3 to 6 lbs., per sq. ft., by roll.	0 04	0 04 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra.		
Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount.		
NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7 1/2 cents.		

Solder.

Bar half-and-half	Per lb.	Pe
Standard	0 11	0 11 1/2
Wire	0 10 1/2	0 11
"	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09 1/2
Other makes, per lb.	0 08	0 08 1/2

Anti-Friction Metal.

"Beaver" brand	\$0 20	
"Tandem" A	0 19	
" B	0 16	
" C	0 10 1/2	

White Lead.

Pure, Assoc. guarantee, ground in oil, 25 lb. irons	Per cwt.	
No. 1 do	5 35	
No. 2 do	4 97 1/2	
No. 3 do	4 60	
No. 4 do	4 22	
Brandram's B. B. Genuine	3 85	
" Decorative	6 35	
" No. 1	6 15	
" No. 2	5 55	
f.o.b. Halifax, St. John, Montreal, Toronto	4 85	
James' genuine	6 70	
" No.	6 20	

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon ..	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe	1 35	1 40
cwt		
Yellow Ochre (J.F.L.S.), bbls. per cwt	2 75	
Yellow Ochre (Royal), per cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt.	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	0 10
do. "	0 10	0 10
do. "	0 09	0 09
Drop Black, pure	0 09	0 09
Chrome Yellows, pure	0 18	0 18
Chrome Greens, pure, per lb.	0 12	0 12
Golden Ochre	0 03 1/2	

Ultra marine Blue in 28-lb. boxes, per lb.	0 08	
Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb.	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb.	0 04 1/2	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks	0 13 1/2	
50-100 lb. kegs.	0 14	
25-lb. irons	0 14 1/2	
-lb. boxes	0 15	

Sulphate of Copper.

Casks, for spraying, per lb.	0 04 1/2	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk	1 60	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)		per gal.
Carriage, No. 1	1 50	
Extra do.	2 50	
Body Varnish	4 50	
Furniture Varnish	0 65	
Extra do.	0 90	
Demar Varnish	1 60	
Hard Oil Finish	1 40	
Orange Shellac Varnish	2 00	
White Shellac	2 20	
Rubbing Varnish	2 50	
Polishing Varnish	2 50	

Linseed Oil.

Raw, per gal. net	0 42	
Boiled, per gal. net	0 45	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net	0 42	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 09 1/2	
Small lots	0 10 1/2	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
------------------------	------	------

Glue.

(In bbls.)		
Common	0 07 1/2	0 08
French Medal	0 10	0 10 1/2
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatin	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear	0 19	0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom. 50 and 5 p.c. Amer.		
Rim Fire Pistol, 45 p.c. Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p.c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent. Amer.		
Central Fire Cartridges, pistol sizes, Dom. 30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and Dominion" grades, 25 per cent. Rival and Nitro, 17 p.c.		
Shot.		
Canadian, common, 17 1/2 per cent.		
Brass Shot Shells, 55 and 10 per cent.		
Primers, Dom., 30 per cent.		

Wads.—Baldwin.

Best thick white felt wadding, in ½-lb. bags.....

Best thick brown or grey felt wads, in ½ lb. bags.....

Best thick white card wads, in boxes of 500 each, 12 and smaller gauges

Best thick white card wads, in boxes of 500 each, 10 gauge.....

Best thick white card wads, in boxes of 500 each, 8 gauge.....

Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....

Thin card wads, in boxes of 1,000 each, 10 gauge.....

Thin card wads, in boxes of 1,000 each 8 gauge.....

Chemically prepared black edge grey cloth wads, in boxes of 250 each—

11 and smaller gauge.....

9 and 10 gauges.....

7 and 8 gauges.....

5 and 6 gauges.....

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge.....

9 and 10 gauges.....

7 and 8 gauges.....

5 and 6 gauges.....

Anvils.

Per lb.....

Anvil and Vice combined, each.....

Wilkinson & Co.'s Anvils, lb.....

Wilkinson & Co.'s Vices, lb.....

Augers.

Gilmour's, discount 65 p.c. off revised list.

Hollow Steam's, per dozen.....

Adjustable Steam's, each.....

Post-hole, Vaughan's, each.....

Excelsior, Jennings', discount 50 per cent.

Awls.

Sewing, per gross.....

Pegging, ".....

Brad, ".....

" handled, per gross.....

Saddler's, per gross.....

Awl Hafts.

Patent Peg, ".....

" Sewing, per gross.. }

Awl and Tool Sets.

Miller's Falls, per doz.....

AXES.

Splitting Axes.....

Chopping.....

Black Prince.....

Forest Clipper.....

Lance.....

Mann's.....

Maple Leaf.....

Hand Made.....

Climax.....

Phantom.....

Axle Grease.

Per gross.....

Bath Tubs.

Zinc, discount.....

Copper, discount, 40 and 10 p.c. off revised list

Steel clad, 20 per cent. discount.

Boxing extra

Bells.

Hand.

Brass, 60 per cent.

Nickel, 55 per cent.

Door.

Gon " Sargent's.....

Peterboro', discount 50 per cent.

Cow.

American make, discount 66½ per cent.

Canadian, discount 45 and 50 per cent.

Farm.

American, each.....

House.

American, per lb.....

Bellows.

Hand, per doz.....

Moulders', per doz.....

Blacksmiths', discount 60 per cent.

Belting.

Extra, 40 and 10 per cent.

No. 1, leather, discount 60 per cent.

Standard, 55 per cent.

Agricultural, 65 and 5 p.c.

Bench Stops.

Per doz.....

Bits.

Auger.

Gilmour's, discount 65 and 5 per cent.

Excelsior, discount 60 per cent.

Rockford Common, 65 to 65 and 5 per cent.

" Perfection, 50 and 10 per cent.

Jennings' Gen., net list to 5 p. c. discount.

Car.

Gilmour's, 47½ to 50 per cent.

Expansive.

Clark's, per cent.

Excelsior, 10 per cent.

Gimlet.

Clark's, per doz.....

Diamond, Shell, per doz.....

Nail and Spike per gross.....

Blind Rollers.

Annex, per doz.....

Mascott, ".....

Erminie, ".....

Blind and Bed Staples.

sizes, per lb.....

Bolts.

Carriage, dis., 70 p. c. off new list

Tire, dis., 70 and 5 per cent.

Stove dis., 70 per cent.

Elevator, dis., ¾ to 40 per cent

Machine, dis., 70 p.c.

Coach Screws, dis. 80 p.c.

Boring Machines.

Complete, with augers, each..

Braces.

Barber's.....

Barber's Ratchet.....

Farmers.....

Illar's Falls.....

Brackets.

Shelf.

Japanned Canadian, per doz.

pairs.....

Berlin Bronze Canadian.....

Brollers.

Light, dis.. 65 to 67½ per cent.

Reversible, dis., 65 to 67½ per cent.

Vegetable, per doz., dis. 37½ per cent.

Henis, No. 8, ".....

Henis, No. 9, ".....

Queen City.....

Butchers' Cleavers.

From 8 to ch, per doz.....

Butts.

Brass.

Wrought Brass, dis., 17½ p.c. revised list.

Cast Iron.

Loose Pin, dis. 70 per cent.

Wrought Steel.

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.

Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.

Berlin Bronzed, dis. 70, 70 and 5 per cent.

Gen. Bronzed, per pair.....

Can Openers.

Acme, per gross.....

Sardine Scissors, per doz.....

Card.

Horse, per do.....

Carpet Stretchers.

American, per doz.....

Bullards, per doz.....

Carpet Sweepers.

Bissell, per doz.....

World, ".....

Daisy, ".....

Star.....

Crown Jewel, per doz.....

Grand Rapids,.....

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57½ per cent.

Plate, dis. 52½ to 57½ per cent.

Cattle Leaders.

Nos. 31 and 32, per gross.....

Cement.

Canadian, Portland.....

English.....

Belgium.....

Canadian hydraulic.....

Figures are for barrel lots.

Chalk.

Carpenters' Colored, per gross.....

White lump, per cwt.....

Red.....

Crayon, per gross.....

Chisels.

Socket, Framing and Firmer.

American, dis. 75 to 77½ per cent.

Canadian, dis. 50 and 10 per cent.

Tanged firmer, per doz.....

Churns.

Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.

Steel, net.....

Clamps.

Judds', dis. 20 per cent.

Stearns, per doz.....

Clips.

Axle dis. 65 per cent.

Coffee Mills.

Box.....

Side.....

Enterprise, No. 0.....

" No. 2.....

Compasses, Dividers, Etc.

American, dis. 62½ to 65 pe cent

Cradles, Grain.

Canadian dis. 25 per cent.

Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.

Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.

Door Springs.

Torrey's Rod, per doz..... (15 p.c.)

Coil, per doz.....

English per doz.....

Draw Knives.

American, dis. 70 and 10 per cent.

Canadian, dis. 25, 50 and 10 per cent.

Drills.

Hand and Breast.

Miller Falls, per doz.....

P. S. & W., dis. 40 per cent.

DRILL BIT.

Morse, dis. 37½ to 40 per cent.

Standard, dis. 50 to 55 and 5 per cent.

ELBOWS.

Stovepipe.

Per doz.....

FAWCETS.

Cork Lined, per doz.....

Wine, per doz.....

Star, ".....

Fenn's Corkstops, No. 2, per dozen.....

Petroleum, per doz.....

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 30 and 10 to 70 per cent.

Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.

Black Diamond, 50 and 10 per cent. to 50 10, 5.

Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.

Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.

Heller's Horse Rasps, 50 per cent.

Jowitt's, English list, 25 to 27½ per cent.

American, 60 to 60 and 5 per cent.

Great Western, 60 and 10 per cent.

FLUTING MACHINES.

Each.....

FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.

FREEZERS

Ice Cream.

Gem, from \$1.25 to \$7 net.

White Mountain, dis. 50 p.c.

Arctic, dis. 50 p.c.

FRUIT PRESSES.

Henis', per doz.....

Enterprise, dis. 10 per cent.

Shepard's Queen City, dis. 15 per cent.

FRY PANS.

Acme, dis. 65 to 67½ per cent.

GAUGES.

Marking, Mortise, Etc.

Stanley's, dis. 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 28 to 33, each....

GLASS.

Window.

Box Price.

Star.

Double Diamond.

Size United Inches.

Per 50 ft.

Per 100 ft.

Per 100 ft.

Under 25.....

26 to 40.....

41 to 50.....

51 to 60.....

61 to 70.....

71 to 80.....

81 to 85.....

86 to 90.....

91 to 95.....

96 to 100.....

101 to 105.....

106 to 110.....

GLUE POTS.

Tinned, each.....

Enamelled each.....

GRINDSTONE FIXTURES

P. S. & W., per doz.....

HAMMERS.

Nail

Maydole's, dis. 5 to 10 per cent. Can., dis. 25 to 27½ per cent.

Tack.

Magnetic, per doz.....

Sledge.

Canadian, per lb.....

Ball Pean.

English and Can., per lb.....

HANDLES.

Axe, per doz., net,.....

Store door, per doz.....

Chest, per doz. pairs.....

Chisel.

Firmer, per gross.....

Socket Firmer, per gross.....

Socket Framing, per gross.....

Fork.

C. & B., dis. 45 per cent. rev. list.

Hoe.

C. & B., dis. 45 per cent. rev. list.

Saw.

American, per doz.....

Plane.

American, per gross.....

Hammer and Hatchet.

Canadian, 45 per cent.

Cross-Cut Saw.

Canadian, per pair.....

HANGERS.

Door, 4 and 5 inch, per pair.....

Lanes, 50 to 50 and 5 per cent.

HATCHETS.

Canadian, dis. 40 to 42½ per cent

HINGES.

Blind, Parker's, dis. 60 and 10 to 65 per cent'

" Shepard's Noiseless, dis. 60 per cent'

" Buffalo, dis. 60 to 70 p. c.

Light T and strap, 70 and 10 p. c.

Heavy, per lb.....

Screw hook and hinge—

6 to 12 in., per 100 lbs.....

14 in. up, per 100 lbs.....

Screw Eureka.....

Gate, Clark's.....

" Shepard's, dis. 50 to 60 per cent.

Spring.....

" Shepard's Samson.....

HOES.

Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list

Planter, per doz.....

HOOKS.

Cast Iron.

Bird Cage, per doz.....

Clothes Line, per doz.....

Harness, per doz.....

Hat and Coat, per doz.....

Chandelier, per doz.....

Wrought Iron.

Wrought Hooks and Staples, Can., dis. 47½ per cent.

Wire.

Hat and coat, dis. 60 to 60 and 10 p.c.

Belt, per 1,000.....

crew, bright, Eng., dis. 60 per cent.

HORSE NAILS.

Canadian, dis. 50 p.c.

Canada Horse Nail Co.'s "C" brand f.o.b. Montreal,.....

HORSE SHOES.

F.o.b. Toronto and Hamilton

Steel,.....

F.o.b. Montreal 10c. less, and London more than above.

ICE PICKS.

Star per doz.....

KETTLES.

Brass spun, 7½ p.c. dis. off new list.

Copper, per lb.....

American, 60 and 10 to 65 and 5 p.c.

KEYS.

Lock, Can., dis. 50 p.c.

Cabinet, trunk, and padlock,

Am. per gross.....

KNOBS.

Door, japanned and N.P., pe doz.....

Bronze, Berlin, per doz.....

Bronze Gem, ".....

Sava, ".....

Shutter, porcelain, F. & L. screw, per gross.....

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00
doz. sets net. to 10 per cent.
Christie, \$7.00 net.
Hay knives, spear point, L or T handle, 60
to 60 and 10 per cent.
Lightning, per doz. 6 50 8 40
Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
Galvanized, " 1 87 3 85
King, wood, " 2 75 2 90
" glass, " 4 00 4 50
A glass " 1 20 1 30

LINES.

Fish, per gross 1 05 2 50
Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
Russell & Erwin, per doz. 1 75 7 50

Cabinet,

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00
Scandinavian, " 1 00 2 40
Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.
Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
No Name Metal, " 18
Mystic Metal, " 08
F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50
Carpenters', hickory, per doz. 1 25 3 75
Lignum Vitae, per doz. 3 85 5 00
Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85
f.o.b. Toronto, Montreal, Hamilton,
London.

Cut Nails (Steel). Add 10c. to the prices in
list for iron nails.

Wire Nails, basis, \$1.83 Pittsburgh, or \$2.04
delivered Toronto, Hamilton, London.

Terms, 4 months or 3 off and 30 days; de-
livered in lots of 10 kegs or more.

Brads and finishing nails, special sizes, 80
p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon,
per gross 3 38 4 00
Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
Carbon safety " 0 18 0 00
Canada w. w. " 0 18 0 00
American w. w. " 0 00 0 21
Pratt's Astial. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can,
with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

" Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis
Mfrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to

2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range 1½

to 4. 100 00

No. 56 Hand Machine, range 2½

to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent.,

American dis. 55.

Wood, fancy Canadian or American, 37½

to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 27½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½

40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors', " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis

60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's " 7 00 12 00

RAZOR STROPS.

Curriers', per doz. 1 25 3 60

RIVETS AND BURS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc.,

(Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc.,

(Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclu-

sive, 65 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier,

65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burs, 50, 10 and 5 p.c. dis.

" ½ lb. boxes and

cartoons, 1c. per lb. extra, net.

Burs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. Sisal. 5½ 00 7½

¾ in. " 5½ 00 7½

¼ and 5-16 in. " 6½ 00 8½

Cotton " 15 17 8½

Russia Deep Sea " 00 13

Jute " 6½ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

" N.P., per set. " 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.

B. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes,

per dozen 0 40 0 70

" Empire, McMillan & Haynes,

per ft. 0 00 0 70

Hand, Disston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Disston's, per ft. 0 35

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

" Lincoln, McMillan &

Haynes, per doz. 0 00 7 50

Whiting " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ &

10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis.

77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 80 p.c.

N.P., dis. 10 p.c.

Clauss, full nickel, 60 p.c.

" japanned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

" "tinned, " 1 25 1 35

Tin rim, per doz. 2 30 2 45

black. " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme " 3 00 5 00

Lock, Andrews' " 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English " 1 8 5 00

Iron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross 7 50 12 00

Dessert, " 21 00 00 00

Table, " 30 00 30 00

Desert Forks, " 24 00 00 00

Medium " 27 00 00 00

Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90

Steel, dis. 70 per cent. revised list.

Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized " 00 2½ 00 2½</

**PEARSON'S
PATENT**

Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2½ to 48 inches.

The Montreal Roofing Co.

Sole Manufacturers for the Dominion, Montreal

CHARLES F. CLARK,
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ESTABLISHED 1849.

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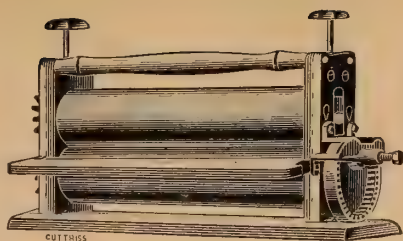
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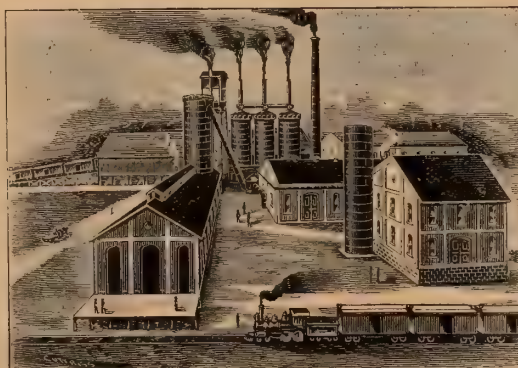
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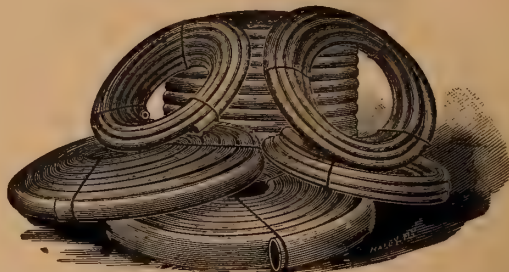
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VOL. IX

MONTREAL AND TORONTO, SEPTEMBER 11, 1897

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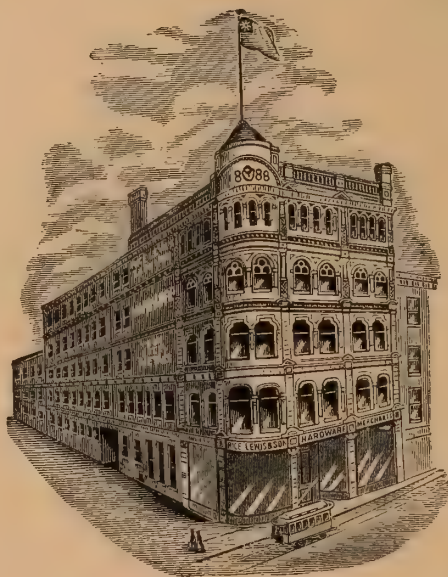
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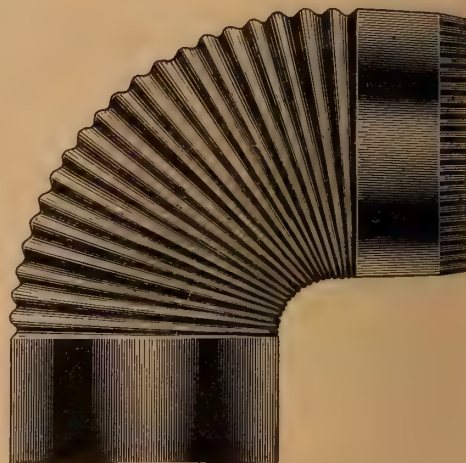
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CANADA'S MORNING BREAKS.

IT is now thirty years since the Dominion of Canada first began to fight for existence; yet it is only now that the morning of her life is breaking. During this period, which although stretching over a number of years is after all but a mere atom of time in the world's history, Canadians have been steadily pushing their country to the front. Internally they have been endeavoring to make it a place where every man would be able to live a happy and contented existence without too great a struggle against adversity. Externally they have been attempting to make it a country which would present a bright and attractive face to the other nations of the world. They have built railroads and canals and other means of locomotion. They have used their vast timber supplies to build a commercial navy which is now traveling on every ocean. They have encouraged agriculture and kindred industries. They have developed their national mineral wealth, and they have established manufacturing concerns to supply domestic wants. They have done everything which seemed to them best in the interests of national prosperity; and they have done these things with a

quiet assertiveness which is now bearing fruit.

During the past ten years Canada's internal trade has grown by leaps and bounds. The union of provinces in 1867 extended inter-provincial trade, and to uphold this trade railroads, cities, wholesale establishments and large manufacturing concerns have grown up. But it is when we turn to consider Canada's foreign trade that we see what an enormous advance she has made. In 1868 this foreign trade amounted to \$130,000,000. For the year ending June 30, 1897, Canada's foreign trade was about \$250,000,000, or nearly double what it was in 1868.

This is certainly a most creditable achievement, and it is all the more striking when we compare these figures with those of Great Britain and the United States. The foreign trade of the United States amounts to about \$25 per capita, while that of Canada is about \$50 per capita. In other words, according to her population, Canada is doing twice as much foreign trade as the great republic of which we hear so much.

Great Britain is doing a foreign trade which is steadily on the increase. For the first eight months of 1897 she imported £11,000,000 more of foreign goods than during the corresponding months of 1896 and exported £3,000,000 less, thus leaving a net increase of £8,000,000. But this increase is made up on her import trade, whereas Canada's great increase is made up on her export trade. Canada's exports during the past five years have shown an enormous expansion, while her imports have remained almost stationary; and this is why Canada's foreign trade makes a more favor-

able showing than even the foreign trade of that greatest of all commercial nations, Great Britain.

The figures for the month of July show that Canada's exports increased about \$5,500,000 and her imports some \$300,000, as compared with July, 1896. If this, the first month of the present fiscal year, is to be taken as an indication of what the whole year is to be, there are even brighter times ahead.

When a merchant sits down and considers these facts it must give him great encouragement, or, at least, he should be able to draw great encouragement from them. The prosperity of the nation means the prosperity of its citizens, and Canada's rapid and continued advancement means a rapid and continued advancement on the part of those merchants who are making their progress commensurate with the progress of the nation. This is certainly a time when the manufacturers and merchants of Canada may take fresh heart, fresh courage, and adopt new means for extending their trade. Canada's products are finding a good sale abroad, and the Canadian producer is receiving much more for his produce than ever before. It is the live business man who will take advantage of this and make certain that he receives his full share of the wealth which the nation's prosperity is creating.

ELECTRICAL CABS IN LONDON.

In London a company has placed a dozen electrical cabs, resembling coupes, in the streets. The accumulators consist of forty cells capable of propelling the cabs over fifty miles at a cost of fifty cents. The

rear wheels do the driving and the front wheels do the steering. They have heavy rubber tires and upholstered spring cushions, are lighted by electricity, are speedy and almost noiseless. They appear to give every satisfaction. The machines seem to be under perfect control and thread their way wonderfully through the traffic. The tariff is the same as that of the cabs. They look like a cross between a brougham and a four-wheeler, with accumulators underneath.

THE COAL MINERS' STRIKE.

ONCE more we see friction between capital and labor, and the long list of disagreements has one more to record. There can be no question but that the trouble in the bituminous coal situation is due to conditions that have compelled the operator to underpay his labor to sell his coal. It is frankly confessed on both sides that the pay is poor, and that it is insufficient to generate the marginal efficiency of labor. Both parties are acquainted with the fact, and both are willing that the conditions should be so changed that both earnings of management and labor earnings should be legitimately large. True it is, mine owners are not all unwilling to treat the miner who works in damp foul air as a fool, but while unfortunately there are too many there are fewer than is generally supposed. It is to the interest of both that the profits should be as large as possible. The Age of Steel says that strikes may sometimes be favorable to producers who corner products and to agitators who thrive on the fat of the fish they fry, but the majority of men, both workers and employers, would much rather see the wheels of the waggon roll on than see them stop.

The fact is, that in the present instance all are in the mud. It is an anarchy of conditions and not of classes. The market price and the labor price are locking horns. Competition on one side has compelled discontent on the other. The man with no profits and the man with no meat are involved in the same disaster. The one cannot sell only at low prices, and the other cannot work at the wages compelled by the other. The remedy lies in lifting the price, and the problem is how best to do it. If it is true that the annual consumption of coal in the United States can be produced in less

than one hundred days, it is evident that the output must be regulated to avoid a ruinous surplusage. It is possible that, as we develop our industries, increased demand may come nearer productive capacity, but even then our plethora of resources might once more renew the same old evil by capital being too eager to make investments and perhaps less scrupulous as to economic effects. The situation is one of complicated conditions, and the Gordian knot is not likely to be cut in a day, but that it will promote investigation and compel some unwelcome study as to where we are drifting by our inordinate passion to underbid competitors and secure trade at the sacrifice of equity and good sense, is one of the good things that may come out of evil. This coal strike, like all others that preceded it, will be settled, but so long as we rush production beyond reasonable limits, the same old trouble will reappear. There can be no getting rid of the cat while we continue raising the kittens.

EXPECTED BOOM IN WIRE.

There is at present no visible reason why there should not be a tremendous boom in barb wire next spring. The high prices of wheat and most other farm products certainly ought, to a great extent, to fill the farmer's pockets, and where he has been slack in repairing his buildings or his fences from a poverty of means, the new turn in affairs will see a change in the situation. Land also will rise in value with the prices of cereals, and on that account the care of fences will demand more attention.

Speculation is taking time by the forelock and will probably make things lively both in prices and sales. Of course the cheapening of prices next spring will increase the demand, but in addition, the competition of American houses in catering for the Canadian trade promises to make the business in this line more interesting. It has been rumored that a Cleveland wire firm was to ship some 15 carloads of wire into Canada this fall, and thus obtain advantage of the summer freight rates, while by leaving it in bond till next January duty will not be imposed.

Taking them altogether, circumstances in conjunction will likely have a favorable effect on barb wire interests next spring.

BRITISH VS. U.S. GALVANIZED PLATE.

HARDWARE AND METAL had occasion previously to refer to the fact of the competition between United States and British galvanized plate for the possession of the Canadian market. At that time, though they admitted that Yankee plate was being largely sold in Ontario, brokers who represented British plate said that they were quite satisfied with the orders they were getting from Ontario, whereas little or no American plate could be placed in the east in competition with British owing to the advantage in freights that the latter possessed. The imports at the port of Montreal during the present summer fully bear out this contention. There has hardly been a steamer arriving that has not had a considerable consignment of British galvanized plate on board for the west and the east, the lots on many of the vessels aggregating from 500 to 800 boxes. Imports of this magnitude do not look as though British plate was defunct, but that it was very lively, indeed. Another fact that acts against United States galvanized plate is that commission men and jobbers do not like to handle the goods, as shippers at American points will sell to anyone whether they are jobbers or not. A leading Montreal broker told HARDWARE AND METAL the other day that he handled both the British and the American. Makers of the former sold and would quote only to jobbers, whereas he had quotations on American plate for almost every small station throughout Ontario. As the brokers had to be consistent with their chief customers, who naturally were the jobbers, British plate got the benefit of their influence whenever it was possible to swing an undecided buyer in its direction.

A SIGN OF THE TIMES.

The Globe File Manufacturing Co., Port Hope, Ont., resumed operations last Monday with a large number of orders on their books. They were compelled to stop their works for two weeks to have a new dam built. By so doing they have secured more power. They have made other extensive repairs to enable them to meet the growing demand for their goods, among which is another exhaust fan for clearing the atmosphere in the grinding and forging departments. Their factory is now equipped with the latest improved machinery, and they give steady employment to sixty hands.

INFLUENCE OF THE MARKET ON SALES.

THE manner in which the tendency of the market affects sales is now being shown very clearly. Everything, or at least almost everything, is advancing in price. Quotations, both foreign and local, are higher weekly in some line or another, and it is an exceptional thing for lower prices to be quoted. If they are quoted it can easily be proven that there is something else besides the price of cereals affecting that particular market. As these govern the prices in nearly all lines it is quite reasonable to expect this.

Toronto dealers all seem unanimously of the opinion that they never booked such large orders during any previous Exhibition week. The high prices have not at all frightened their customers, on the other hand they all seem hopeful of a good winter's trade.

This fact clearly explains the different attitudes of the traveler towards his customer, according as the tendency of the market varies. If you have ever noticed a traveler's tone when he is quoting a falling,

and also when he is quoting a rising market, you will quite readily recognize a difference in his two manners. When the prices of the goods he sells are rising he talks to his customer with quite an independent air, but when the market is falling he indulges in far more eloquence over the good qualities of his goods.

This is all on account of the different inclinations of his customers. When prices are rising almost invariably the retailer wishes to buy, thinking that they will go higher and they are right at the present time, but when prices are falling the fear of a further easiness makes them eager to dispose of what goods they have, and it is very difficult to induce them to purchase.

WHITE LEAD ADVANCING.

Cables regarding foreign markets show that white lead is steadily rising in price, one dealer in Toronto this week receiving advice of a rise of 10 shillings a ton a few minutes after he had received notice of receipt of order by cable. This gives one an idea of how fast all lines of paints and oils are advancing in quotations. All lines of

lead are moving in sympathy. The result of all this, of course, will be that prices cannot remain stationary; indeed, they are not so now. We may even quote higher prices in this week's markets.

It is not altogether likely that this will be a sudden jump in the market. All lines are moving, and the lead line more particularly, and the advance is likely to be of a steady character.

GLASS VERY FIRM.

WITHIN the past week or so a distinctly firmer tendency has been noticed in the glass market. Buyers, if their orders lately are any criterion, fully recognize the fact, for they are not only taking goods with a reasonable degree of freedom, but are placing orders ahead for a large quantity of material. In fact, some sellers are disposed to act very conservatively in this respect, being afraid that the market will advance on them before these orders are filled. Values, both in Belgium and Great Britain, are firmly held, and it seems reasonably certain that if prices do not advance lower prices will not be quoted this fall.



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PRINCIPLES IN FINANCE--MONEY.

Henry Douglas Parmelee, in Business.

IN attempting to give in a narrow scope an adequate idea of the essence, forms, functions, laws, and different theories in regard to money, one is faced with many difficulties. The different theories in regard to what really constitutes money, and what laws should regulate the world's circulations, make it impossible to confine the subject to a short article and give a thorough presentation.

It is not intended to attempt anything beyond a mere statement of fundamental principles. There is much literature upon the subject, and many works which give very fully the history and laws of money. It will only be necessary in this article to suggest lines of thought to the reader and encourage a desire upon his part to further investigation. If the article serves its purpose in inspiring such investigation, the writer will consider that his object has been fully accomplished.

THE ESSENCE OF MONEY.

We saw, as the commerce of the world began to increase and extend, that the use of a basis for obligations in commercial transactions became necessary. In order to bring producers and consumers together there was need of an agent, and the agent used was called "money." In barter it was very difficult to do away with the double coincidence of wants and possessions, and in order to facilitate transactions a medium of exchange was necessary.

In defining money, economists have expressed widely different views. All fallacies in relation to monetary systems and currency schemes have risen from an inadequate understanding of the real essence of money. The definition which the writer wishes to quote, and one which he believes will clear up many discussions, is the following: "Money is best defined as a thing which, by common consent of the business community, is used as a basis of commercial obligations."

The value of money depends upon the number of other commodities which can be bought by a unit of money. This may be best illustrated by saying that when prices are exceedingly high, it takes a larger number of units to purchase commodities, and the purchasing power of money is said to be low. When prices are exceedingly low, more things can be purchased by the same unit of money, and hence we say the purchasing power of money is high. As value in almost all things is determined, so the value of money is determined by its supply and its demand. The different schemes for determining the general price level ought really to be taken up here, but

it will be impossible to deal with them in the space to which this article is confined.

DIFFERENT FORMS OF MONEY.

We know that at a certain period in the history of the world, wood, iron, and lead were used as media of exchange. They had a value then just as gold and silver have to-day. To depart from the older forms of money and adopt those which more fully accomplish the work has always been the tendency demanded by the increasing interests of the world.

In our own country tobacco, wampum, nails, and skins were used as money, but all these things have given way to the larger needs of advancing civilization.

Jevons enumerates the necessary qualifications of a medium of exchange as being: Indestructibility, homogeneity, stability of value, cognizability, portability, divisibility, utility, and value.

METALS.

Gold and silver have been chosen alone for their higher intrinsic value, and gold to-day is the real measure of value and standard of deferred payments.

It is necessary to distinguish what rightly constitutes money. Many believe, and among them a well-known economist, that "whatever does the money work is the money thing." This view is rejected by the majority, however. Money is a commodity, and as such it is governed by the same laws as other commodities, and in like manner its value is determined by supply and demand. It is not always the quantity of money in circulation that determines its value, but the surplus over and above what is actually needed for the transaction of business. A careful distinction should be made between "money" and "currency." Media of exchange have two classifications, the commodity, money, and its representative, currency, always based upon the commodity for its value. The distinction between the commodity and its representatives, which are always certificates of that money being held in deposit, is often lost sight of, and the result is that many misapprehensions arise.

The immense amount of transactions which are carried on yearly by the nations of the world without money being transferred in any way, is simply enormous. Those transactions, amounting to millions of dollars, are often settled by the payment of a small balance. The fact that this balance is always paid in gold is the strongest proof of the universality of that metal as the standard of value.

No government nor group of people can give value to currency, and here are meant promises to pay money. It is possible for a government to decree that certain media of exchange be used as money, and to that

end we have created legal tenders, but outside of the domains of the Government these legal tenders may be of no value, unless those to whom they are offered place reliance and faith in the integrity, honesty, and ability of the Government which issues them, to accept them as equivalent to money.

The old expression, "a thing and a promise to pay a thing," really defines the difference between money and currency. Government notes, treasury certificates, bank notes, bills of exchange and cheques are all forms of currency, but their value rests wholly upon credit, and they are called "credit instruments." Because they do "the money work" is not a sufficient reason why they should be called the "money thing."

All money is currency, but all currency is by no means money. The complex currency system of our country containing, as it does, different forms of media of exchange, has given rise to great apprehension upon the part of the business men of the nation. It is made up of many forms of promises to pay. Stable business conditions cannot be expected until the system is simplified. No laws nor enactments can increase the credit of our country, which is now as good as any in the world, but they can take away the liability of periodic disturbances caused mainly by apprehensions in regard to the Government's ability to redeem its pledges.

MONEY OF ACCOUNT.

Many transactions are settled by what is known as "money of account." This simply means that commodities are used in settlements which are not universally used as money. Long-time contracts are very often made payable in the cereals, because it is maintained that the value of the cereals from century to century fluctuates very little. It is almost impossible to have a universal famine. Pestilences which destroy the cereals are not world wide, and for that reason the quantity of grain produced in the world varies but little from year to year. The suggestion that long-time contracts can be made to advantage to the contracting parties provided the settlement of such contracts was made in grain, is a good one. There are, however, more chances of temporary fluctuations in grain than in gold, so that much trouble might arise owing to the fluctuations.

Stability of value, in the long run, is found to lie in wheat to a greater extent than in gold. The world's production of the latter very often fluctuates owing to the discovery of large deposits.

In the international settlements gold bullion is often used instead of coin. This is done to prevent melting coin, especially if its bullion value is a trifle higher in one country than in another.

THE NATURAL LAW OF MONEY.

Sir Thomas Gresham (1519-1579) noticed that the circulation of England contained large volumes of chipped and abraded coins and that the new products of the mints were fast disappearing from circulation. He accounted for this in such a way as to have had his observation become a law. Gresham's Law, briefly stated, is that "bad money always drives out good money." As soon as currencies become debased through abrasion or wilful demolition of coins, the bullion value is very much reduced, and the currency immediately depreciates. The crime of abrading coins is very severely punished whenever detected, and governments throughout the world have taken every precaution to prevent the practice. The milled edges and raised surfaces of well-made coins prevent their being debased to a great extent.

CURRENCY.

In order to facilitate exchange and as a matter of convenience in the settlement of large balances, credit instruments play a most important part. Most forms of credit instruments take their value from their redeemable qualities in coin, and this is usually understood to mean gold. It has been demonstrated very often during the past four years that the least suspicion or distrust in regard to the ability of our Government to keep its promises and redeem its pledges created disastrous disturbances in the business community. A great deal has been said about patriotism, and about true Americans trusting in the integrity of the Government's promise, but at the same time, sentiment does not seem to rule very strongly when the depletion of the treasury reserve excites fears little short of panics. None but the ignorant conceive intrinsic value in a promise to pay: the value of such promises lies solely in the amount of confidence which one places in the promiser.

FORMS OF CREDIT INSTRUMENTS.

There are five forms of credit instruments in use in United States' currency. They are, the Notes, commonly called "greenbacks," Gold Certificates, Silver Certificates, and Treasury Notes.

The fifth form of currency used is the national bank note. The national banks of the country, under an Act of 1863, were allowed to issue their own notes up to 90 per cent. of the face value of Government bonds, which were bought by it and deposited with the Government as a trust and a firm basis of the circulating notes. These bonds were issued in order to raise money to carry on the war. The Secretary of the Treasury, Mr. Chase, conceived the plan of creating a market for the United States bonds in the form of the national banks.

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The history of the national banks of the United States is very interesting.

The laws at the present time are not favorable to an increase of national bank circulation. There are those who believe that the Government should be taken out of the banking business and should no longer issue its own notes to be used for circulation. The argument is based mainly upon the so-called "endless chain" in reference to the continuous redemption of the United States notes. Those who believe that the Government should be taken out of the banking business are the advocates of a circulation created by the national banks. They desire to accomplish their ends by having more advantageous laws passed, and they promise a more elastic currency, or in other words, a currency which will expand to local needs more rapidly than our present currency.

Those who disapprove of the retirement of the "greenbacks" say that no individual or private institution could supply the demand for gold in times of stringency as well as the Government, and they point to the crisis of 1893, when the banks refused to pay out gold. There are many arguments upon both sides, and opinion at the present time seems to be pretty evenly divided.

It is not essential to go into detailed discussions in reference to the gold standard on the one hand and free silver coinage on the other. The subject is receiving daily attention by the best financial journals in the country.

It is upon such subjects as these that the future of our currency depends. Their careful study is necessary in order to minimize the periodic disturbances which have caused great distress in our country. It is needless to refer to the efforts of the present administration toward currency reform. What can be said is little, to be sure, but that public opinion is loudly demanding reform of our cumbersome system is without question.

In 1867 the International Monetary Conference, which was held at Paris, decided almost unanimously to adopt an international coinage such as would be sufficient to transact international business and pass as legal tender in all countries. In seeking a basis for ulterior negotiations, the members of the conference chose the 5-franc gold piece as a common denominator and favored the coinage of a 25-franc gold piece for larger transactions. The proposal was to be put before the different governments represented and the power of reconvening was

left with France. Owing to the fall of the Second Empire, the matter was never taken up again. If the efforts which are now being uselessly expended in trying to bring about international agreements, which recent developments have rendered ridiculous, would only be put in an attempt to bring about what the conference of 1867 formulated, the objects now being sought would be put aside as entirely unworthy further serious consideration.

In attempting to give a few of the fundamentals in regard to money and currency, the writer must apologize for falling far short of what he really would wish to accomplish.

BIBLIOGRAPHY.

Much has been written upon the subject of money, both of a controversial and a scientific character. The works of to-day are apt to be written to excite rather than to enlighten the masses upon the complex subject. An unprejudiced opinion is what should be sought for, and this is to be found in very few works.

ROLLER BOAT LAUNCHED.

FOR weeks past the Messrs. Polson's shipyard at the foot of Frederick street, Toronto, has been visited daily by large numbers of curious sight-seers, all of whom had been attracted by the fame of the novel craft known as Knapp's roller boat, which has been in course of construction since early in the spring; but Wednesday evening the climax was reached when, in the presence of an immense gathering and amid considerable excitement, the boat was successfully launched upon the waters of the bay. The launch had been advertised to take place at 5 p.m., but long before that time the crowd began to gather, and at 6.40 p.m., when she first touched the water, the great shipyard was filled and the adjoining wharves and points of vantage were crowded with spectators. During the long wait the topic of conversation was, of course, as to the success or failure of the boat. Some thought that she would sink as soon as put in the water. Others who believed that she would float could not understand how she could be steered, or how, if she does go, that she can be regulated, etc., but after she had been put in the water and it was seen that, notwithstanding the immense weight of the craft, she only draws two feet of water, many ideas were changed, and now it may safely be said that Mr. Knapp has many converts to the feasibility of his idea.

As viewed on the stocks before launching, the "boat" seemed to be nothing more nor less than a huge tank or boiler, its dimensions being 110 feet long by 22 feet in diameter. The diameter is the same throughout the full length, with the exception of

five feet at each end, where it tapers to 15 feet in diameter, so that the aperture at each end is well out of the water. Inside of the vessel, at each end, a track similar to a railway track, but wider, has been laid, or rather, fastened, to the outside cylinder, upon each of which a platform will be placed. On these platforms the motive power will be placed, which will consist of two 200-horse-power boilers and two pairs of high-pressure high-speed engines, each pair of engines having a capacity of 200 horse-power.

Each platform will rest upon the track, on a set of wheels, somewhat similar to the wheels of a railroad car, except that they will have two flanges instead of one. They will be three feet in diameter, the centres between the flanges being fitted, or rather filled, with paper, to deaden the noise and to cause a greater amount of friction. The driving part of the engines will be connected with these wheels, so that when the engine is set in motion it and the platform will constitute something corresponding to a locomotive on a railroad track. As it proceeds to go forward it will begin to climb the inside of the cylinder, but only for a little way, for by reason of the friction or grip of the wheels, and also by reason of the weight of the boilers, engines, etc., it is expected that the vessel will begin to revolve.

Mr. Knapp says that the best description of the principle involved in his invention is to think of a squirrel in a revolving cage, the engine and platform being the squirrel.

The engines are geared two to one, and can be run at a speed of 600 revolutions per minute. The intention at present, however, is to run them at about 300; this means that the wheels of the platform will run at a rate of 600 revolutions per minute. As the wheels are nine feet in circumference, the platform will, therefore, be traveling at a rate of 5,400 feet, or a little over a mile a minute.

Nearly all the internal parts are now ready for placing in the boat, and it is expected that the trial trip will be made in about two weeks. When completed it will weigh about 100 tons. The engines and boilers weigh about 30 tons, so that the boat itself will weigh about 70 tons. Mr. Knapp says that this is far too much, that in their anxiety to have a staunch craft the builders have used a grade of steel far in excess of actual requirements, in fact, that a craft 50 feet in diameter need not be any heavier than the one now launched. The cost will be about \$25,000, and is being borne by Mr. George Goodwin, of Ottawa, the well-known contractor of the Soulages Canal. This is a large sum, and Mr. Knapp says that too much credit cannot be given to Mr. Goodwin for his pluck in back-

ing the enterprise, especially when it is considered that all this expense is being undertaken solely for the purpose of proving the correctness of his ideas and to obtain data, if the experiment is successful, for the construction of a huge ocean roller at least 750 feet long and 150 feet in diameter.

Mr. Knapp, who is a barrister hailing from Prescott, first began to think of a "roller boat" in 1892 while on a voyage across the Atlantic. He eventually had a model constructed, which he subsequently took over to Glasgow and submitted to some of the best naval architects there. Most of them admitted the practicability of the idea, but when it came to the question of wanting capital it was another matter. After several attempts to raise money Mr. Knapp returned to Canada, and one day accidentally met Mr. Goodwin, to whom the idea was submitted. Mr. Goodwin soon came to the same conclusion as the naval architects in Glasgow, but, unlike them, he said, "If this thing succeeds it means millions; besides, it will be a good advertisement for Canada. Go ahead." The result so far was seen Wednesday night, when, amid the cheers of the crowd, the vessel nearly completed was seen to glide from the stocks into its future element.

LIQUIFIED AIR.

"Compressing air until it will remain compressed without any pressure upon it" are the few words with which a writer in The Electrical Engineer describes the new product, "aerine," or liquified air, remarking that, though requiring an enormous pressure to get it in such a form, it will remain there for some time in the open air; that is, until it gets heat enough from the surrounding air to turn again into its natural state. It will turn mercury into a solid form as soon as it is poured into it, and freeze up a thermometer rapidly. Such is the assumed prospective usefulness of this liquid that predictions are made of distant water powers now running to waste being soon employed compressing the very air we breathe into a liquid form and shipping it to all parts of the globe for industrial purposes.

WIRE NAILS

WIRE - TACKS

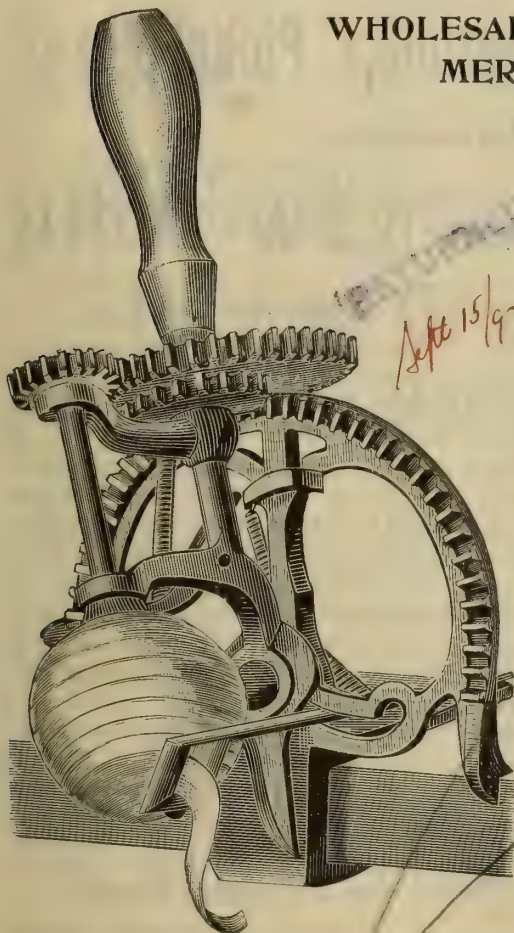
Ontario Tack Co.

HAMILTON

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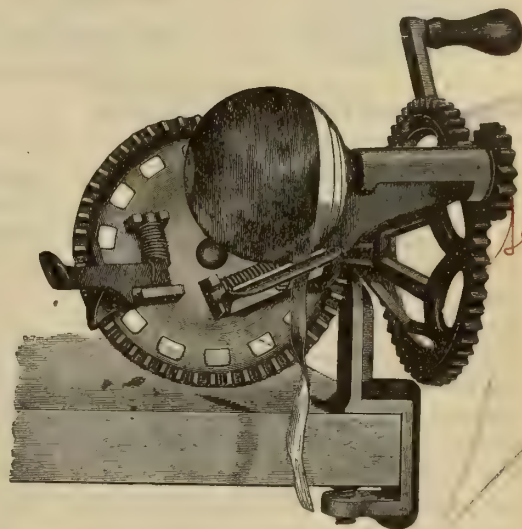
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...Toronto



Sept 15/97
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PARERS**

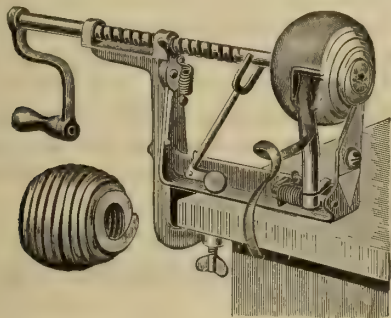
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Woodyatt's Hudson
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Fastest Hand Paring Machine in the World.
Packed 1 Doz. in Box. Weight, 47 Lbs.

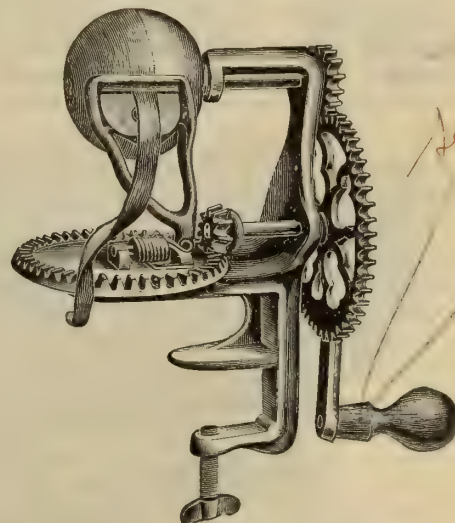


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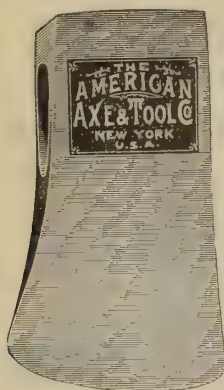
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Catalogues and Price List on application.

A MODERN WAREHOUSE.

It is usually supposed that iron and other hardware material do not lend themselves readily to neatness. This conception is due to the helter-skelter appearance of most yards where such stock is stored. That it is a false one a visit to the metal warehouse of Caverhill, Learmont & Co., Montreal, clearly demonstrates. This warehouse was acquired by its present owners after the recent fire. It has been rebuilt and remodelled in solid masonry into an ideal site for the storage of heavy goods. Having a depth of 300 feet from Colborne to Ann street, and a frontage on both of 90 feet, there is naturally ample accommodation for a very extensive stock. The main entrance is on Colborne street, Nos. 12, 14 and 16 being on this street, while the frontage on the Ann street side comprises Nos. 44, 46 and 48. Entering from Colborne street are two large offices, one the private office of Mr. Caverhill, and the other the public office for the staff of clerks employed in this department of the firm's business.

It is the ground floor, however, that will forcibly strike the eye of anyone conversant with the handling of heavy goods, for the fact will be recognized at a glance that this is just the spot for expedition in the receipt and despatch of bulky material. A broad drive runs through the middle of the ware-

house from Colborne to Ann street. Altogether there is ample room for loading and unloading a score of wagons at the same time.

Another striking advantage is that the stock is entirely sheltered from the weather. This is not the case in the majority of iron yards. It usually happens also that an iron warehouse is a dark, gloomy place; it is not so in this case, for a number of large skylights give plenty of light all over the building. On the Colborne street front there are, in addition to the ground floor, two large flats which will be used for the storage of such goods as agricultural implements, tools, etc. A large hoist runs to both these flats. In the rear there is only one flat in addition to the ground floor, which is also reached by a hoist, but it is an exceptionally large one, as the first lot of a stock of 10,000 boxes of window glass were being placed in it at the time of the writer's visit.

Being situated on the banks of the canal, goods can be shipped from the warehouse by water with promptitude. For rail shipment, there is a branch track of the Grand Trunk to the rear entrance for use in the case of carload shipments. Telephones connect the warehouse with the city offices of the firm on St. Peter street, as also the public system, and altogether the establishment is most completely equipped in every particular for the expeditious transaction of business.

PRICES OF BICYCLES.

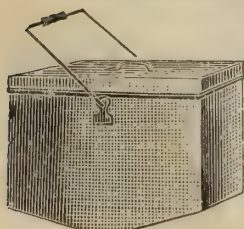
The slash in the prices of bicycles is still going on. **HARDWARE AND METAL** saw a window full of bicycles in Montreal the other day, "Your choice for \$20," and yet the really good machine is being sold for \$75 to \$100. It is hard to say just what the end of it all will be. It is fairly safe, however, to prophesy that the \$100 wheel of 1898 will be quite a departure from the wheels built in '95, '96, '97 as regards quality. It is generally admitted that the chainless wheel will be placed on the market next season and in all probability be sold at \$100, but it is not believed that this is the only improvement that can be made on the 1897 wheel. In the meantime makers are unloading themselves of their stocks.

PILLOW-HERSEY'S SHOE.

As will be seen by their announcement in our advertising columns, the Pillow-Hersey Manufacturing Co. are out with their new 1897 model horseshoe. This shoe is made of double refined iron or basic steel to suit the requirements of their patrons, and many advantages are claimed for it. It is made in various sizes and weights. The company have issued a handsome little booklet descriptive of this shoe, showing a fac simile of it and giving some practical instructions for shoers.

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INCORPORATED 1895



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COAL HODS,
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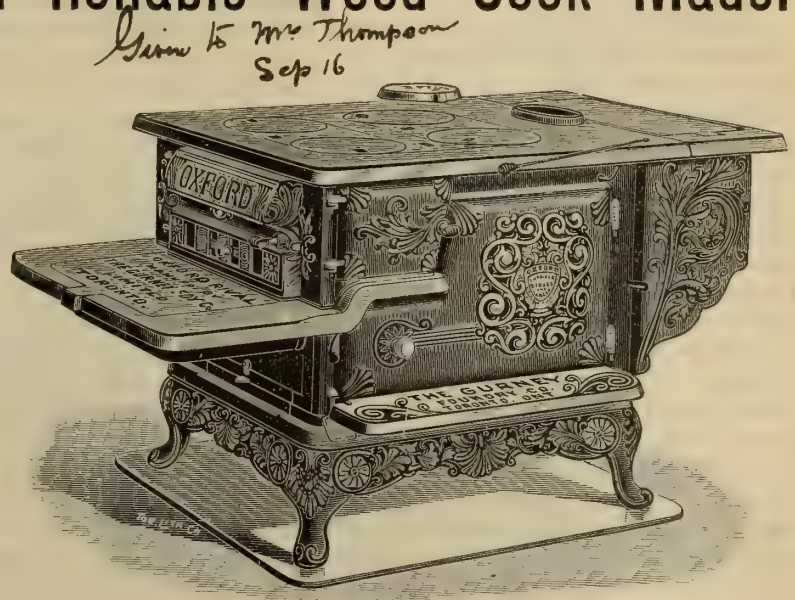
The Most Popular and Reliable Wood Cook Made.

It gives unbounded satisfaction, being
well known and valued all over the
country.

Supplied in 3 sizes with or without
Reservoir, Fancy Shelf and Nickel Trim-
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It has a larger oven and fire box than
any other stove of its class, and takes extra
large wood.

It sells easily on its merits. Write
for details, the price is specially reason-
able.



The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.

LITTLE THINGS.

IF any merchant is in need of a motto to hang on his wall let him put one up that will read this way: Take care of the little things and the big things will take care of themselves. But after hanging it there, he should not think he is through with it. Have it hung where it can often be read, and read it often. If there is any one warning that the trader of to-day needs, it is caution as to his carelessness of little things. In these days of keen competition and small profits he ought to act according to this motto in every transaction of his business. It should be so impressed on his mind that he should never forget it.

We often hear the question asked: Does generosity pay, and the answer comes in eloquent language that it does. How beautifully do the theorists develop their reasoning on a practical basis. But, after all, it's only theory. Proofs of the validity of the argument are given from the experience of some hero, but never are there any exceptions quoted to prove the rule. Those examples that the theorists give are experiences of lucky ones only. If any one should have an opportunity of taking a close view of the common every-day business, it is reasonably certain that afterwards he would not pursue a policy of winning trade by mere generosity. In modern business a man is forced to keep a close guard on his belongings; he can't recklessly throw his goods about in order merely to gain a reputation of being generous. It is twice as hard to keep that reputation as it is to win it.

For a long time department stores were reputed all over the land as being the only places where big profits were not made. They adopted the policy of being generous in a few lines and of making this loss up in others, but now the public has recognized the dupe and already the mail-order patronage is decreasing in volume. A business gained by such methods has only a fleeting patronage and cannot last.

If the failure of some traders were traced to the cause, it would be found due to their generosity in weighing or to the use of scales so lacking in sensitiveness that a fraction of a cent, sometimes even more than a cent, was lost on every draft. Because this loss is in goods and not in money, it is not generally considered. A trader or his clerk would be sure to pick up a penny found lying on the counter, but goods representing that amount are often swept off the counter without a thought of the value they represent, and, as a general rule, the arm of the balance containing goods is heavier than the weights in the other pan. A pound is a pound and should never exceed nor fall short of 16 ounces. One ounce is over 3 per cent. of a pound

and to reduce many profits by 3 per cent. of the selling price makes a great difference. A trader owes it to his customer to give no less, and self preservation demands that he give no more, than 16 ounces.

However, the lack of generosity is not to be reduced to stinginess. A merchant does not need to be generous to retain his customers, but above all things he must not be stingy. Rules cannot be laid down and followed strictly; each merchant must adapt himself to circumstances.

Then, again, the dealer has to be careful of many little things when he is liable to lose his customer's confidence. The loss of a single customer is perhaps, viewed as a single loss, unimportant, but the influence of the lost customer exerted against the store will cause the loss of other customers. The failure to deliver an order at the time specified is a little thing, but the customer's plans may have been upset by the delay and a seed of dissatisfaction sown that may be reaped as the loss of a customer. The failure to fill an order correctly or the omission of a single article may be a little thing, but the forgotten article may have been the one most needed and—well the results are known.

WHAT MAKES GOOD CREDIT?

WHILE commercial agencies are a necessity in this age of electricity, there are too many merchants who attach too much importance to their reports. The reports are probably correct in the main, but it is practically impossible for any one concern, no matter how well represented in every county in the United States, to thoroughly grasp the financial condition of all merchants, with the changes in that condition that are constantly occurring.

A good credit is not always determined by a rating in Dun's or Bradstreet's. Where jobbers or manufacturers know their man personally, or where their trade with that man has been intimate and honorable for years, no agency report on earth could jeopardize the credit standing of that man. Sometimes a dealer worth \$10,000 is less desirable as a customer than the man worth \$1,000. It is the man himself, not the money he possesses, that in most cases determines the extent of the credit he can obtain. If the dealer is known to be rigidly honest, careful in buying and extending credit, firm in collecting, and pays his bills when due, or when forced by unforeseen circumstances to fall behind, explains his situation fully and frankly, he can buy all the goods he needs and few questions will be asked him.

It is the custom of many large concerns not to ask how much property a man has or how much he can pay on short notice, but to demand to know the habits of the man,

both as regards business and morals. If they learn that a dealer is doing a good business, but is engrossed in horse racing or loves poker too well, they limit his credit at once. If, on the other hand, they learn that the dealer is a young man of limited capital, sober, earnest, able, anxious to proceed and careful in all his conduct, they never hesitate to sell him more goods than he could pay for if pushed. Many a merchant has often wondered why his credit was not commensurate with his rating by the commercial agencies, but if he will take into consideration the fact that it is the man and not the money that jobbers and manufacturers sell to when credit is a part of the transaction, the solution of the problem will be plain to them.—An Exchange.

HOW THE DUNLOP TIRE WAS INVENTED.

THE Dunlop tire is now an article of world-wide popularity, and it may therefore interest our readers to learn that J. B. Dunlop, the inventor, is not, as is often supposed, an Irishman, but a native of Scotland, says Invention, of London. He was born in the village of Dreghorn, Ayrshire, his father being a farmer at Ligat, on the Eglinton estate. His connection with Ireland began when, at 21 years of age, he went to County Down to practise as a veterinary surgeon, afterwards removing to Belfast.

Mr. Dunlop tells the story of the inception of the invention in the following words: "My son, who was then very young, rode a tricycle with solid tires. One day I incidentally remarked to him that I could make the fastest tricycle in the world. Then I began to work out the matter. I got a large block of wood about fifteen inches in diameter, and I bought some sheet rubber one thirty-second of an inch thick, and of good quality. With that I made an endless air-tube, into which I inserted a small supply air-tube made of the material which is used for children's feeding bottles. I placed this endless tube round the block of wood, and then I secured a band of fine linen cloth, which I fastened temporarily to it by means of tacks. I inflated the tube with a pump just in the way one would inflate a football. Then I ran it along the garden walk, and it carried for about sixty yards, and rebounded off the gate. I next ran a solid-tired wheel, and it scarcely reached the gate."

Mr. Dunlop's opinion of the tire as it is at present is that it is well-nigh perfect. He is reported as saying that he does not think it can be very much improved so far as speed is concerned. Tires may be made extremely difficult to puncture, but such tires will be slower, and people seem to want the speed. Mr. Dunlop has no doubt that the cycle will continue to be very popular. The demand in future years will not seem so great, simply because the production will be increased, and the supply quite equal to the demand.

Bicycles..

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and PELHAM**

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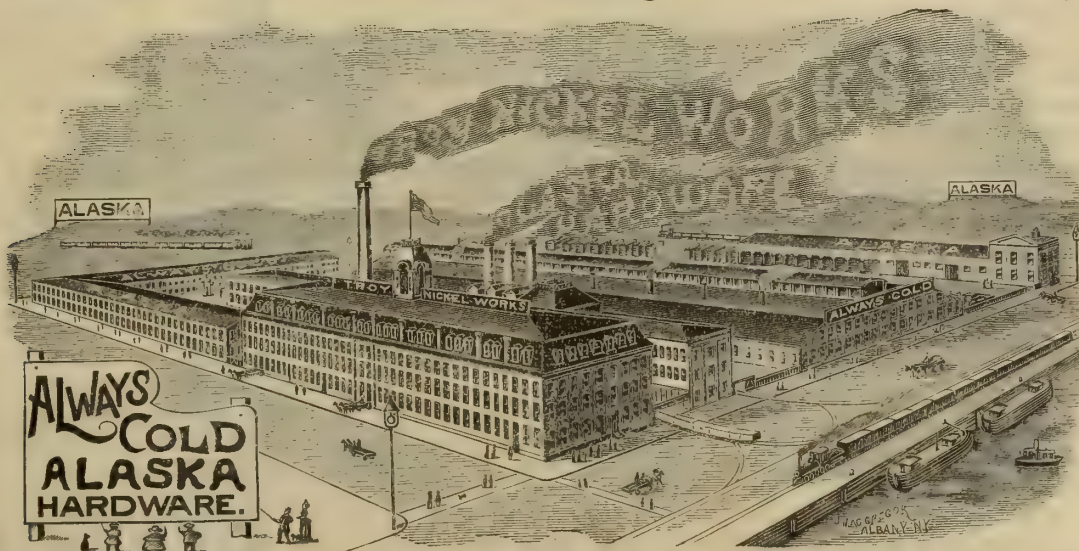
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Pipe Dampers
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ALASKA

Stove Trimming

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Pokers, Shovels
Dampers Attachments
Etc, Etc.



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send to us for prices. We will land
the goods at your door. WRITE US
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TROY NICKEL WORKS, Albany, N.Y.

ALUMINUM COOKING UTENSILS.

THE following remarks on the employment of aluminum in the manufacture of cooking utensils are extracted by The Metal Worker from an interesting and valuable paper on "The Utilization of Aluminum in the Arts," recently read before the Franklin Institute of Philadelphia, by President Alfred E. Hunt, of the Pittsburgh Reduction Co.

One of the most promising uses of aluminum at the present time is in the fabrication of aluminum cooking utensils. The lightness, difficulty of corrosion, ease of keeping clean, high thermal conductivity and comparatively high specific heat of the metal, make its use for cooking utensils particularly advantageous.

In sheet metal work of aluminum, relatively better results are obtained with stamped work. Aluminum can be spun as readily as can almost any other metal; but it must be borne in mind that the metal is not only light in weight, but relatively to other metals it is also open in texture. The spinning operation being of such a character as to spread apart the particles of the metal a much more open surface is presented for corrosion. While in many places spun articles in cooking utensils, as in the tops of teapots and similar articles, are in every way all that can be asked of them, where an article can be as well stamped into shape it is always better practice to carry out this method of shaping the utensil. The cast aluminum tea kettle is certainly an improvement in household economy, of which every housewife who has used them can speak enthusiastically.

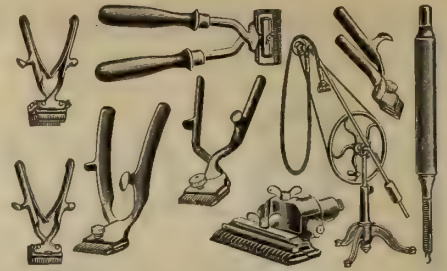
A complaint has been made of aluminum cooking utensils that they turn black by wear. This has sometimes been occasioned where the metal has been subjected to the action of sulphureted hydrogen, and where the aluminum contained a sufficient amount of copper alloyed with it to form a black sulphide of copper on the surface of the metal; but by far the largest portion of this difficulty can be attributed to the action of ammonium salts, which gradually attack the surface of the aluminum, leaving behind a coating containing silicon, which, although rapidly attacked by concentrated alkali, resists very many solutions of organic matter, as well as moist or dry air. An aluminum surface which has thus been treated has a brown or blackish color. It is really a very serviceable way to treat the metal for a durable finish, to withstand corrosion; but it has occasioned complaint on the part of those who do not understand the phenomenon as being caused by impurities in the aluminum.

I have investigated several such cases, where only absolutely pure aluminum has been used, and have found that the discoloration referred to was of this surface coating of metallic silicon on the metal. This action need occasion no anxiety on the part of users of aluminum cooking utensils, as there is no injurious action in the discoloring coating, which may be removed by treatment of the aluminum with caustic alkali, doing this by rubbing the metal with a rag dipped in alkali in a way to avoid too serious corrosion of the aluminum. Care, of course, should be taken by one using caustic alkali not to burn or corrode one's hands, as well as the aluminum. With the exception of the looks, this coloration need cause no uneasiness, for there is no real detriment to the healthful use of an aluminum cooking utensil so discolored.

On the other hand, if simply boiling water in a pure aluminum cooking utensil causes this marked black discoloration of the metal, it is a serious indication that the water used is not above reproach, and it usually indicates that the water contains a considerable proportion of free ammonia in solution, which may be occasioned by contaminating sewage.

One of the great advantages of aluminum is that the salts which are occasioned by its corrosion are not in any way poisonous. Aluminum can be easily kept clean from corrosion by the same care bestowed on bright work of brass or other metals. In fact, with one-half the work required to keep brass work polished, aluminum can be kept with a nice polish. Pure aluminum is not by any means as readily corroded as the alloys. The natural impurities of aluminum are silicon and iron, and both tend to render it more easily corroded than the pure metal. With imperfectly made aluminum, metallic sodium is sometimes alloyed with the metal. Its presence occasions the rapid corrosion of the aluminum. If the aluminum has been overheated in its molten condition it is liable to occlude gases, especially nitrogen, which occasions an open, soggy, porous metal, which is more easily corroded than pure aluminum. With better knowledge as to the methods of working aluminum, a great deal of the trouble which has been occasioned in its first use, due to the corrosion, will be avoided.

My experience with cooking utensils and similar articles, where corrosion has occurred, is to the effect that the cause of the trouble can be traced back either to an excessive amount of hydrochloric acid or chloride salts, or to the presence of caustic alkali solution in contact with the metal. All aluminum surfaces in utensils, after being wet, should be carefully dried off if practicable, for with all forms of metal one of the most serious forms of attack is by alternate exposure to water which is allowed to gradually evaporate or dry on the metal, the residues in the water occasioning dirt to settle upon the material, and some little corrosion is occasioned on almost every form of metal.



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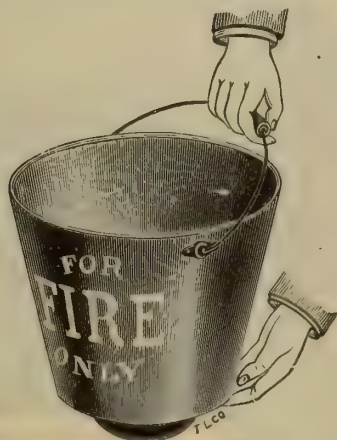
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Round Bottom
Fire Pails**



It can't be used around the stable.
It would be a failure in milking.
The washerwoman wouldn't take it
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It is

“FOR FIRE ONLY”

and can only be used as such.
Note the round bottom.

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MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Sept. 10, 1897.

HARDWARE.

THERE has been a good movement both in shelf and heavy hardware during the past week. The demand for prompt shipment is quite active, while orders for future delivery are of the most encouraging character, as indicating the expectation of a good fall trade. Barbed wire has been more enquired for, but plain continues quiet. Wire nails are active, and orders for cut nails have been quite numerous. Screws are quiet, also bolts, but there is a brisk demand for rivets. There is a better enquiry for cordage, building paper, cutlery and sporting goods. In fact, the last three lines are quite active.

BARBED WIRE—The firmer tendency has induced more enquiry, but of a moderate character. We quote the basis \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—There is a firmer feeling in wire and more demand is noted, especially for hay-baling wire, while discounts are held steadier at 30 per cent.

WIRE NAILS—There has been no change in these yet, except that jobbers are not as disposed to cut the price below \$2 as they were before. Enquiry was of a fairly good character in a small way on the basis of the above price.

CUT NAILS—Business continues as noted

last week and there is a fair volume of small orders coming in. We quote \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is a fair trade in horse nails, at steady prices; discounts 50 per cent.

HORSESHOES—There is a good demand for these. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$3.50; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Demand quiet and prices steady. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Without change, business ruling quiet and discounts as before, 12½ per cent.

BOLTS—There is still a fair volume of orders for bolts. Discounts are: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach, 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough bolts, 65 per cent. Square nuts, 4¼c. off the list, and hexagon, 5¼c.

RIVETS—Business continues quite brisk in rivets, especially for tinned, etc. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There is a fair demand for cordage. We quote as follows: Sisal, 7-16 and upwards, 5½c.; ¾, 6½c.; 5-16 and ¼, 6½c., and 3-16, 7½c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS AND CLOTHES WRINGERS—Very little to report regarding either.

HARVEST TOOLS—Business is practically closed in these.

SPADES AND SHOVELS—Without any life except a few orders for draining tools such as long-handled shovels, etc.

FILES—Are well enquired for. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80.

CARPENTERS' TOOLS—There is a moderate demand for these in assortments.

BUILDING PAPER—Enquiry for this line is more animated, especially for roofing felt. We quote 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

LEATHER BELTING—There have been fair enquiries for supplies of these goods.

WARE—Both granite and tinware are in active demand, though orders are for moderate quantities.

MARS DOUBLE HEATER

A New Stove

TAKES 27-INCH WOOD

Heavy sectional linings that can be easily replaced.

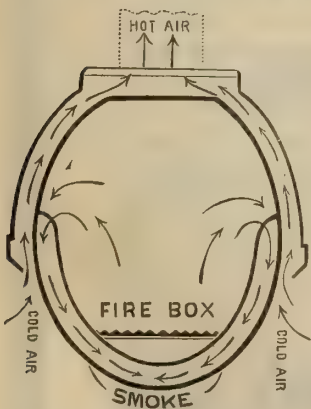
Flues same as in a base burner.

Legs and base packed inside for shipping.

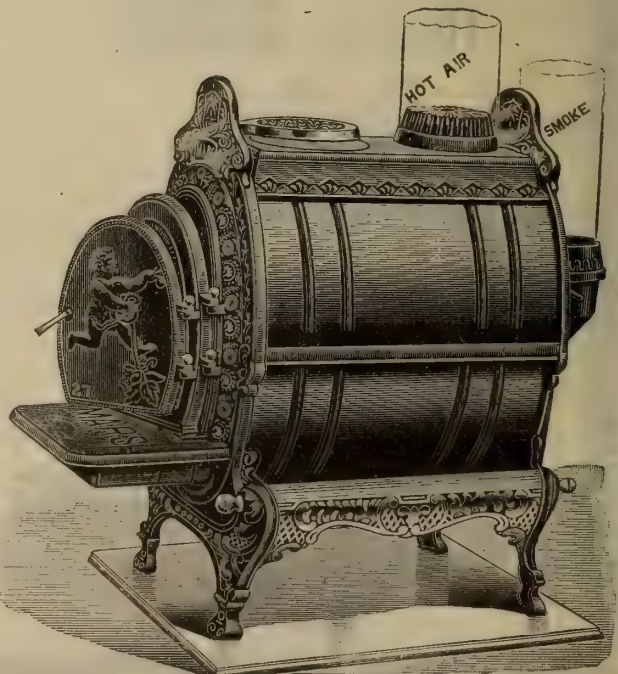
Has one 8-inch pot hole over fire-box.

Russian iron body with nicked trimmings.

WRITE FOR PRICES



Cut shows smoke passage and circulation of hot air.



THE MCCLARY MFG. CO.

London, Toronto, Montreal, Winnipeg, Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL



"BUILD TO-DAY THEN,
STRONG AND SURE.
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

DO YOU?

WISH THUS TO BUILD
an
advertisement
in the
CONTRACT-
RECORD.

TORONTO
will bring you
tenders from the
best contractors



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosse, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman 403 St. Paul St.
Sporting Goods Co.

MONTREAL

HINGES—There has been no change in these, a good jobbing trade passing. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—There has been a good enquiry for cutlery, both for prompt and future shipment.

SLEIGH BELLS—Orders for these are coming forward quite freely.

SPORTING GOODS—There is a good demand for sporting goods of all kinds.

SHOT—In active request. We quote: Dropped shot, 16c.; chilled shot, 6½c., and buckshot, 7c., less 17½ per cent. trade discount.

CEMENT—Trade continues active and prices are steady. Belgian moved freely this week on the basis of \$1.85 to \$1.95.

FIREBRICKS—In good demand and steady at \$16 to \$21 per 1,000, as to brand.

METALS.

The market is firm and advancing all along the line. Especially does this apply to pig lead, which is now firmly held at 3¾ to 4c., according to quantity. Copper and tin are also higher. The consumptive demand for all kinds of material is daily increasing, due to the great improvement in trade in the States. Dealers throughout the country got so educated to declines during the past three years that stocks are low all over. The present demand is therefore abnormal. Pig iron is firm. Some American makers ask \$1 per ton more. Manufactured steel plates, bars, sheets, angles, etc., are all moving upward, and consumers are beginning to realize that it is somewhat difficult to obtain reasonably prompt delivery. Iron pipe and boiler tubes are firmly held at the advance, and higher prices are anticipated in the near future. The general situation is regarded by merchants as extremely hopeful, some going so far as to predict that if we are not on the eve of a boom we are very near it.

PIG IRON—Rules firm and business rather better. We quote: No 1 Hamilton, \$15.50 to \$16; No. 2, \$14.50 to \$15 for No. 2; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrshire, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—There was a fair enquiry for bar iron and prices are steady at \$1.35 to \$1.40.

BAND IRON—Steady, with a better enquiry, at \$1.65.

HOOP IRON—With light stocks values are firmly held at \$2.25.

SHEET STEEL—Demand has developed. The base price is firm at \$2.35.

SHEET IRON—Medium sizes continue scarce and values are firmly held on the basis of \$2.25.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
"	Rivet Iron	AVB
"	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
"	Rivet Iron	AXB
"	Stay Bolt Iron	AXB
"	Hammered Iron	AHB
"	Charcoal Iron	ACB

**Tyre, Sleigh Shoe,
Axe and Rivet STEEL.**

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

**FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING**

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNally & Co. - MONTREAL

GALVANIZED IRON—There has been a good demand from stock and some gauges are reported as scarce. The weather is everything that can be desired for roofing, and so long as it continues demand will likely keep up. We quote: "Gorbal's" Best Best, No. 28 gauge, \$4.15; "Queen's Head" do, \$4.15, and "Morewood," according to quality, \$4.25 to \$6.

TINNED IRON—There is a fair demand at unchanged prices. "Gorbal's" Best Best and "Bradley's" 6x30, No. 24 basis, 5 1/2 c. Other sizes and gauges usual extras.

LEAD PIPE—Owing to the advance in raw material prices have been marked up. We now quote 7c. per pound for water pipe and 7 1/2 c. for waste and composition pipe, subject to a discount of 30 per cent. off.

PIG LEAD—Owing to still further advances in the English market prices here are now 3 3/4 to 4c., according to quantity. The market is bare of stock and dealers have no difficulty in getting these rates.

INGOT TIN—Very steady with a fair enquiry at 16 to 16 1/2 c.

INGOT COPPER—Firm, with a higher tendency, at 12 to 12 1/2 c.

SHEET COPPER—Steadily held. We quote: Sheathing copper, 14 1/2 to 16c. according to weight and quantity; braziers', 15 1/2 to 17 1/2 c. per lb. according to gauge.

IRON PIPE—Prices are firm at the advanced rates recently noted, with a large business doing. The demand this fall is expected to be heavy. We quote: Black pipe, 1/8-inch, \$2.50; 1/4 to 3/8-inch, \$1.85; 1/2-inch, \$2.35; 3/4-inch, \$2.84; 1-inch, \$3.91; 1 1/4-inch, \$5.15; 1 1/2-inch, \$6.66; 2-inch, \$8.97. Galvanized pipe, 1/4-inch and 3/8-inch, \$3.10; 1/2-inch, \$3.90; 3/4-inch, \$4.72; 1-inch, \$6.55; 1 1/4-inch, \$8.98; 1 1/2-inch, \$11.45; 2-inch, \$15.57.

CANADA PLATES—Active enquiry is reported for these, and prices rule steady at \$2.25 to \$2.30.

TIN PLATES—In good enquiry, and orders for future delivery are large also.

We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—The market is steady on the basis of \$6.25.

BOILER PLATE—Firm and fairly active at \$1.90 to \$2.

SOLDER—Quiet and unchanged at 12c.

SPELTER—Held steady at \$4.75.

ANTIMONY—A few lots are moving at 9 1/2 to 10c.

SHEET ZINC—Fair demand at 5 1/4 to 5 1/2 c.

SCRAP IRON—No large contracts reported. Prices are nominal at \$12 for No. 1, and \$6 to \$7 for No. 2.

PAINTS, OILS, ETC.

There is a better feeling perceptible in this department, and, with the continuance of favorable weather, the close of the exhibitions will show much improvement. Prices remain very firm, especially in lead, which has advanced in England the equivalent of 1/4 c. per lb. within the last two weeks. Linseed oil maintains its firmness without change in quotations. Turpentine we quote 1c. advance, and strong thereat.

WHITE LEAD—Strong. We quote: Government standard, \$5.25; No. 1, \$4.87 1/2; No. 2, \$4.50; dry white, \$4.50.

RED LEAD—In fair demand. Genuine in casks, 4 1/4 c.; kegs, 4 1/2 c., and No. 1, 1/4 c. less.

LIQUID PAINTS—Without change.

LINSEED OIL—The firmness continues. We quote: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Firm. Single barrels, 44c.; 5-barrel lots, 43c.

VARNISHES—In fair demand at scheduled prices.

GLASS.

There has been a good business in glass, both for prompt and future delivery, and the quantities moving individually are quite considerable; in fact, buyers seem dis-

posed to stock up with glass. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

There is no change in ashes. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

Heavy chemicals are quite brisk. We quote as follows: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67 1/2 to 72 1/2 c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37 1/2 to \$4.62 1/2; white sugar of lead, 7 1/2 to 8 1/4 c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Lambskins are firmer at 50c. each, while beef hides are steady at 8, 7 and 6c., according to grade.

PETROLEUM.

Petroleum is firm at the advance: Car lots Canadian, 13 1/2 c., and smaller lots, 14 1/2 c.

COAL.

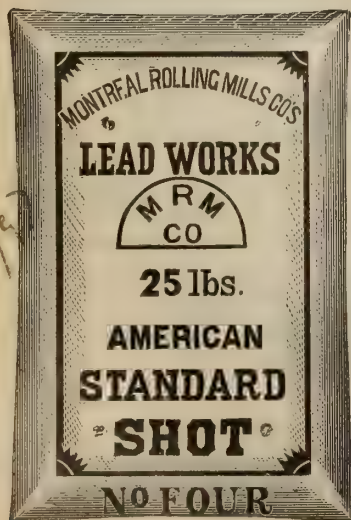
Rules steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard: Scotch steam, \$3.50 to \$3.60 ex ship.

TRADE NOTES.

Arrivals of cement last week were only 9,648 casks Belgian.

Stocks of terne plate still continue very light in this market, and orders, especially for assorted sizes, are difficult to fill.

Receipts of tin and Canada plate have been larger lately, but stocks in jobbers' hands are still far from being well assorted.



Shot . . . Lead Pipe White Lead

Orders Solicited
from the Trade.

We have this year thoroughly overhauled and greatly improved our machinery, and sportsmen will find both our **Drop** and **Chilled** superior in every respect to any made in Canada.

We make all sizes in **LEAD, COMPOSITION, AND WASTE**, and guarantee quality and uniformity of thickness.

Our "**Tiger**" chemically pure is ground from the best imported dry lead, is warranted pure, and is also guaranteed by the label of the White Lead Association of Canada.

MONTREAL ROLLING MILLS CO.

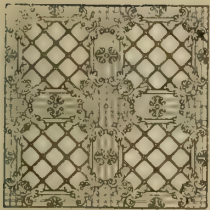
The "Hayes" Patent Metal Lath

Just the
thing for
Pipe Chases

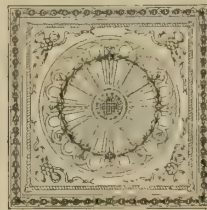


Just the
thing for
Pipe Chases

Used in many of the most important buildings in the Dominion and United States.



**EMBOSSSED
METALLIC
CEILING**



We illustrate herewith three of our designs. You should handle these goods. They are rapidly superseding Lath and Plaster.



The METALLIC ROOFING CO. Limited
MANUFACTURERS. 1170 King St. West ... **Toronto.**

WRITE FOR QUOTATIONS.

ONTARIO MARKETS.

TORONTO, Sept. 10, 1897.

HARDWARE.

THE general trade is hardly as good as it was last week. While there were a great number of retail dealers visiting their wholesale friends, as is customary, their purchases can hardly be said to be as large as in the regular course of business. All, however, regarded the outlook as a bright one, and heavy orders will soon follow. A few changes in prices have been made this week; most of them are due to the advancing quotations on raw material. The discount on lead pipe has been reduced from 30 to 27½ per cent. Shot is also advanced, discount now being 12½ per cent. Iron pipe, as shown in the market report, has also risen slightly, with figures unsettled and subject to change without notice. The heavy demand on Canada plates has at last exhausted the supply in all-bright and the market is about bare.

BARB WIRE—All the orders that are coming in just now are included in general orders. No large shipments are being made, only immediate requirements being provided for. Overstock is being guarded against. We quote: \$2.25 f.o.b. Toronto, Hamilton, Montreal and London. Terms, 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—A slight improvement has been experienced over last week, but the increase is not of much account. Hay-baling wire is about the only thing that is moving briskly. Discount is quoted at 30 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—A steadier business is being done in some lines, such as coppered tin and ordinary twine wire, but there is no brisk demand. Discount, 30 per cent.

WIRE NAILS—Trade is about the same and ruling prices are unchanged. When quoting, freight classification must always be consulted. The ruling idea as to price is \$2.04, Hamilton, Toronto, London.

CUT NAILS—A slight improvement in the volume of business is also to be noted in this line. It is not of much account however. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is quite active and prices are unchanged. Discount, 50 per cent.

HORSESHOES—Business in this line is also good, with a strong demand for steel shoes. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe

weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Trade is steady, but not at all active. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is rather dull this week. Discounts are 12½ per cent.

BOLTS—A fairly satisfactory business is being done. Prices are firm. Discounts are: Common bolts, 3-16, ¼, ¾ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ¾ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—A brisk trade in all varieties is being done. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black

M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Trade is active. Discounts are 17½ per cent.

ROPE—A few demands are noticeable in the general orders, but trade is not at all brisk. A few fall wants are being supplied. We quote: Sisal, 7-16 in. and larger, 5¾c.; ¾ in., 5¾c.; ¼ and 5-16 in., 6¾c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Dash churns continue to be called for rather freely. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Trade continues very dull. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—The season is now over. The only articles classified under this heading for which there is any demand are lathes, corn-knives, corn-hooks and vegetable scoops. Discounts are 60 and 10 per cent.

SPADES AND SHOVELS—Trade is inclined to be quiet. Draining tools are in slightly better demand. Discount, 45 and 2½ per cent.

BUILDING PAPER—Trade is about the same. A slight reduction of 2c. a roll has been made on quantity shipments. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—An improvement in trade has been felt during the last few weeks. This is the time for changes. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—Business continues fair. Orders for small supplies, such as elbows, stove boards, coal hods, etc., are coming in freely. Discount now is 80 and 10 per cent.

HINGES—Jobbers report a good trade. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35.; light T and strap, 70 and 10 per cent.

CUTLERY—Prices remain about the same. The demand, however, has shown a slight improvement.

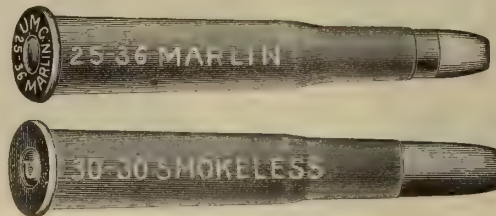
SPORTING GOODS—Trade continues brisk. Large quantities of ammunition are moving, and guns are being freely called for.

POULTRY NETTING—Nothing doing. Discount, 67½ per cent.

STANDARD of
for AMERICA
30 Years



The Marlin Model 1893



in addition to being made for the 32-40 and 38-55 cartridges, is made of special steel to take our high power cartridges, the 25-36 and 30-30 smokeless.

The 25-36 has a 117 grain metal patched bullet with soft lead point, smokeless powder, or a 106 grain metal patched bullet with soft lead point, black powder.

The 30-30 has a 160 grain bullet, either full metal cased or metal patched, with soft lead point, smokeless powder.

If you desire, you can reload the ammunition to suit your purposes, using black powder and a lead bullet with a proper alloy of tin. Cartridges are also ready with light loads for gallery and short range.

Made
in all Styles.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

For Sale by Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

Binder Twine. HOBBS HARDWARE CO. London.

We have led, others tried to follow.

WE STILL LEAD.

::: We Offer

PLYMOUTH - - - - -
CENTRAL PRISON - - - - -
CONTINENTAL TWINE CO.'S - - - - -
DOMINION GOVERNMENT - - - - -

} **TWINES**

GREEN WIRE CLOTH—Now quiet and featureless. We quote: \$1.35 per 100 square feet.

GARDEN HOSE—There are not many enquiries for garden hose. We quote: Standard brands, 72½ per cent.; "Competition," or "Trade," 77½ per cent.

CEMENT—During Exhibition week the trade in cement has been rather dull. The buildings in many city cases were stopped in construction. We quote in barrel lots as follows: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

Owing to the advance in raw materials, prices here are advancing frequently. As

a rising market causes quick sales, shipments both from stock and factory are moving out freely. Stocks are somewhat light also.

PIG IRON—Markets, both in Canada and the States, are firm and bullish, and furnaces are having all they can do to supply the demand. We quote as follows: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16.50 for No. 1, and \$16.15 for No. 2; Southern foundry, \$16.75 for No. 1; \$16.25 for No. 2, and \$16 for No. 3; Niagara, No. 1, \$15.80; No. 2, \$15.30.

BAR IRON—Business is rather dull. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—Trade continues rather good. We quote \$2.20 per 100 lbs.

SHEET STEEL—Shipments can hardly be said to have been as frequent as they were last week, but still a fair amount is doing. Light stocks are also prevailing. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Hardly so much interest has been taken in this line during the week, but yet a satisfactory business is being done. Stocks have not been filled. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Is moving quite freely. Trade is good, with shipments both from stock and factory. The shipments to remove scarcity of lighter gauges have arrived. We quote: Queen's Head (case lots), 16 gauge, 3½c.; 18 to 24, \$3.87½c.; 26, 4½c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (ton to ½-ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are ⅓ to ¼c. per lb. higher than figures named.

TINNED IRON—There is really nothing doing. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6½ to 7½c. per lb.

LEAD PIPE AND TRAPS—Owing to an advance in raw material a further increase in price has been made. Discount now is 27½ per cent. instead of 30. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SOIL PIPE—There is not much going out. Discount is 60 and 10 per cent.

PIG LEAD—This article has taken a very sudden jump, and is now quoted at 4 to 4½c. a pound, an advance of ½c.

INGOT TIN—There has been only a fair quantity moving, no large sales having been reported. Prices are 16¼ to 16½c.

INGOT COPPER—A slight improvement in trade has been noticed developing during the week. Prices in small lots are 12c., but large lots can be shaded.

SHEATHING COPPER—Quite a few shipments in roofing copper have gone forward.

Braziers' and ordinary sheathing have been somewhat slow. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Prices have been changed again and are now: Wrought, ½ inch, \$2.25; ¾ to 1 inch, 1½c.; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet. All these prices are subject to change without notice.

RANGE BOILERS—There are no remarkable features to note this week. We quote as follows: Galvanized, 30 gals., \$5.25 to \$5.30; 35 gal., \$6.50; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Are moving quite freely. The demand for all-bright has exceeded the supply. It is expected that within a few days further shipments of this quality will arrive. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—Trade is not quite so brisk, but it still remains steady. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Remains steady. We quote: ¼ in., 4½c.; ⅜ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—The demand keeps steady with no improvement. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

TERNE PLATES—Are still in fair demand at unchanged prices. We quote: I C, \$6.25 to \$6.50; I X, \$8.

SOLDER—Prices have risen in this line owing to the high prices of raw material. They are now quoted at: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—There have been quite a few small shipments made this week. No large sales have been reported. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

OLD MATERIAL.

In this line too we find that Exhibition week has been dull. Rolling mills will not pay the present price for scrap, and the dealers' prices remain firm. The dealers are expecting that the present prices will prevail as soon as trade resumes its usual course from which it was turned by the tariffs of the past summer, consequently they are buying all the scrap that they can. Foreign quotations on lead, spelter and, in

fact, all the finer metals are somewhat higher this week, in sympathy with the advancing quotations on the raw materials. The higher prices on rags in the States will give the dealers here who have stowed away a great quantity on the other side a good haul. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb; bottoms, 7½c.; heavy copper, 7¾ to 8¼c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 5½c.; heavy red scrap brass, 6¾c.; scrap lead, 2c.; zinc, 2c.; scrap rubber, 3 to 3¼c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

The glass business continues to be very brisk and the markets are quite firm at quotations. As was expected, the run of orders from customers visiting the city was not as large as is obtained by the travelers, but nevertheless they were larger than previous years, and dealers appear to be satisfied. Double diamond was the principal variety called for. It is expected that higher prices will prevail here this fall, as the Belgian market is firm and stocks here are quite light. We quote as follows: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

The quotations in paints and oils require very close attention these days. The situation may be summed up by saying that there is a strong upward tendency in all lines. Lead products particularly are firm, and an advance is hourly expected on account of the advancing foreign quotations. English quotations on linseed oil are higher, flax seed is up, and oil will certainly advance here. Turpentine in the south is higher, and the prevailing low quotations cannot long remain stationary. Trade continues brisk.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.35; No. 1, \$4.97½; No. 2, \$4.60; No. 3, \$4.22½; No. 4, \$3.85; dry white lead in casks, \$4.70.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.25; ditto, No. 1, in casks of 560 lbs., \$4; genuine, in kegs of 100 lbs., \$4.50; ditto, in kegs of 100 lbs., No. 1, \$4.25.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots.

GUM SHELLAC—28c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10c. per lb. and 11c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5 to 6c.; orange mineral, 6 to 7c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 44c.; boiled, 1 to 4 barrels, 47c. Prices in Toronto, Montreal, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 45c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, London and Montreal are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—Trade is picking up considerably, and appearances point to a good fall trade. Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3. Steerhides: 60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Trade is fair and shows no change. We quote; No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 55 to 60c.

WOOL—The demand from local factories is increasing slightly and is giving a better feeling to the market. The quantity of wool in the country is increasing; in fact, from the natural course of events an improvement in the condition of affairs cannot long be postponed. Dealers are still paying 19 to 20c.

PETROLEUM, ETC.

The demand is fair and improving slightly. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14½c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

Business is much about the same as it was a week ago. There is more going out. Prices remain the same. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Mr. Evans, of the Canada Paint Co., has just returned from his trip to the Old Coun-

try. He reports having had a grand time and having come back in the best of health.

All lead products are almost certain to advance.

Solder has advanced from ½ to 1c. in sympathy with the raw material.

Mr. W. Smaill, of the Canada Horse Nail Co., Montreal, was in Toronto this week.

Thomas Howard & Co., commission merchants, Montreal, have assigned at the demand of the Hunter Arms Co., of New York, with liabilities of about \$20,000.

UNITED STATES MARKETS.

NEW YORK, Sept. 10, 1897.

FIG TIN—The market for spot stock was distinctly firmer. Since Friday of last week there have been arrivals at Atlantic ports of about 370 tons, but this new supply appeared to have been well taken care of, and neither speculative or other deals were easy to work except at some advance on late quotations. On 'Change there were more or less official quotations at as low as 13.65c. for prompt and September delivery contracts, but actual tin realized 13.75 to 13.80c. f.o.b. in lots of five tons or more, and could have been purchased at little if any lower price at the close.

The imports of tin at the Atlantic ports for the week ending Sept. 4, as compiled by the New York Metal Exchange, were 265 tons of 2,240 lbs.; total since September 1, 50 tons.

COPPER—The market for ingot is very firm, with Lake Superior on the basis of 11¼c. for early delivery, and other varieties correspondingly firm, or at about 11 to 11¼c. for electrolytic sorts, and 10¾ to 11c. for ordinary casting stock. The speculative branch of the London market was higher, but not enough so to have any pronounced influence here. The exports of copper (matte reduced at 50 per cent. into fine copper) from New York, Baltimore and Newport News for week ending September 4, as per Custom House returns, and compiled by The New York Metal Exchange, amount to 2,074 tons of 2,240 lbs. Total since September 1, 1,743 tons.

PIG LEAD—The market remains firm, and there is a very fair business passing quietly, the bulk of which is in carload lots for early delivery here or shipment from the west. At the close there were, however, few sellers, if any, at less than 4 35c. London cables were strong, and quoted £14 5s. for soft Spanish.

Employer—"I thought you wanted to go to your grandmother's funeral this afternoon?"

Office Boy—"Please, sir, it was postponed on account of wet grounds."

TO EXPORT FERRO-MANGANESE.

The Mineral Products Co., of New York, have made a start in excavating and putting in walls at the Pictou Charcoal Co.'s furnace at Bridgeville, E.R. About thirty men are employed. The company have purchased the furnace and woodland of the Pictou Charcoal Iron Co., who will in the future confine themselves to mining and shipping. The Mineral Products Co. will manufacture ferro-manganese for export. Russell P. Hoyt is general manager. He is now in Hillsboro, N.B., where their manganese deposit is located. W. B. Moore, of New Glasgow, is looking after the works during the absence of Mr. Hoyt. John McDermid, of New Glasgow, has the contract for the stonework.

THE DISTRIBUTION OF ACCIDENTS.

A writer in an English periodical having stated that 75 to 80 per cent. of the accidents in machine shops occur before breakfast time, Laird Bros., the great shipbuilders of Birkenhead, have given out the following figures from their accident book for the last two years: 6 a.m. to 8.15 a.m., 17 per cent.; 9 a.m. to 1 p.m., 50 per cent.; 2.15 p.m. to 5.15 p.m., 29 per cent.; 5.15 p.m. to 6 a.m., 4 per cent. This last item covers only the operations of night shifts in two departments. Probably nearly all machinists have a belief that Monday mornings are especially prolific of accidents, and some data bearing upon that point would be of interest.

Two strong companies will strive to secure the contract for supplying Chatham with natural gas for lighting and heating. One is a local company, the other is composed of Windsor and Kingsville capitalists, and apparently the race between the rival syndicates will be interesting.

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MONTREAL.

EDISON'S ORE CONCENTRATING WORKS.

It looks as if Edison would soon be a factor in the iron trade. An Easton, Pa., despatch says :

"For several weeks 400 men and 20 teams have been at work at West Portal, a New Jersey hamlet, twenty miles below Easton, on the line of the Lehigh Valley Railroad, but it was not publicly known until recently for whom the work was being done. It is learned that the Edison Concentrating Co., at the head of which is Thos. A. Edison, is erecting an immense stone building, 100 by 500 feet and five storeys high, in which iron ore will be separated from the rock and dirt by Edison's process. The building will be completed in a few months.

"The company has purchased 1,000 acres of mountain land near West Portal, in which are deposits of iron ore. Shafts were sunk there years ago and worked for a time, but they were abandoned and are now full of water. These shafts will be worked again and new ones sunk. Men are now building roads from all parts of the mountain to the building site, and four miles have been completed. When the works are in operation, several hundred men will get employment."

AN IMPROVEMENT TO NOTE.

The Armstrong Manufacturing Co., of Bridgeport, Conn., and 139 Centre street, New York, has recently made a number of improvements wanted by the trade in their No "O" pipe machine, $\frac{1}{4}$ to 2 inch, and it ranks among the most complete and satisfactory tools of its kind on the market to-day. They are also making this machine to run by power as well as by hand to suit the work of large shops and mills, and report that the demand for it has been very great the last few months.

Q.—"Why is a dog longer at night than it is in the morning?"

A.—"Because it is let out at night and taken in in the morning."

Mrs. Corcas—"Our league of emancipated women is going to have a lecture on the social equality of the sex. You must be sure to come."

Mrs. Cobwigger—"Certainly, my dear, I shall bring Miss Manners with me, as she believes in social equality."

Mrs. Corcas—"Not for the world. You know she isn't in our set."

Aluminum neckties are on sale in London. They are fastened to the collar-button by a band round the neck, and are particularly recommended for summer wear, since they can be easily cleaned when soiled, while they are not perceptibly heavier than cotton, cambric or silk.

Boeckh's Flat Bridled Brush

We wish that every Painter in the Dominion (or out of it as far as that goes) could see our patent Bridle for Flat Brushes. One look at it would be enough to show its superiority over twine or wire. Absolutely no bulging in the centre of the brush possible. Here's something that will liven up your trade in Painters' Brushes. "Money back if you want it."

BRUSHES, BROOMS
WOODENWARE

Chas. Boeckh & Sons, Mfrs.

Toronto, Ont.

Victorian Base Burner

NEW FOR 1897

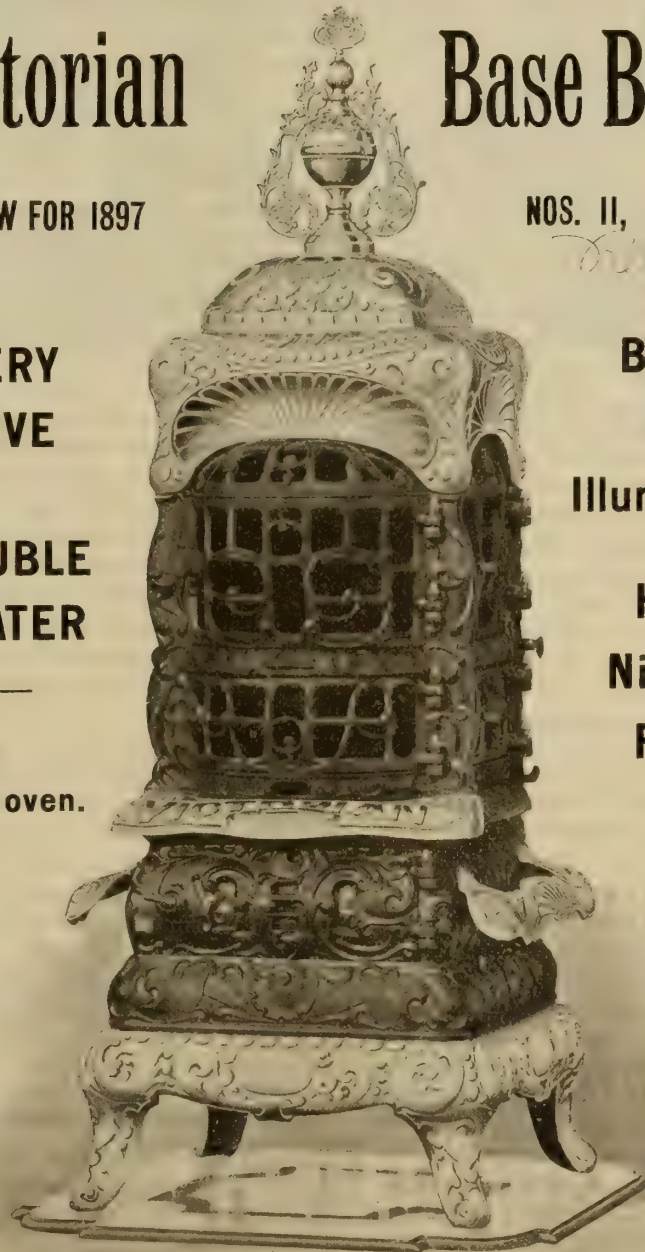
NOS. 11, 13, 15.

EVERY
STOVE
A
DOUBLE
HEATER

Brilliant
Mica
Illumination.

Highly
Nicked
Finish.

No. 15
with oven.



Another of our new productions for this Victorian year. As will be seen from the above illustration, our Victorian is graceful in outline, attractive in appearance, and of the most modern type. Enquiries from the trade will be appreciated and full information given.

THE COPP BROTHERS CO. Limited, Hamilton, Ont.

Plumber and Steam-Fitter

NEW BATH TUB HEATER.

THE latest invention as regards heating water for bath use is made by an Indianapolis firm, and dispenses with the unsightly hot water boiler and stand. It resembles a gas stove in appearance and is substantially lined with asbestos to prevent radiation in the room, and is so connected with the bath as to permit of a constant circulation of the water. The heater is arranged to burn gas or gasoline and is provided with a thoroughly safe gasoline burner. The reservoir is handsomely painted and nicked, and holds sufficient gasoline for several baths.

This heater has a superficial heating surface of 1,000 square inches—equal to a flame of fire over seven square feet of heating surface—and will heat an ordinary bath in from 12 to 15 minutes, making it the acme of perfection as a quick and convenient bath heating apparatus. The overflow and waste combined is so constructed as to automatically drain the heater each time it is used, preventing any danger of frozen pipes, and is so constructed as to be easily taken apart and to admit of easy access. Another merit claimed for this heater is its moderate cost.

HOUSE TO HOUSE INSPECTION.

Progressive plumbers have long been agitating the necessity of municipal regulations requiring house to house inspection. They argue that despite the most carefully drawn laws covering the examination and licensing of plumbers, and providing for the inspection of plumbing work by competent public officers, the health of the general public is always in danger from the unsanitary condition of numerous buildings. A man may spend money lavishly in making his own house as perfect from a sanitary standpoint as modern science and mechanical skill can make it, and yet have the health of his family endangered constantly from foul conditions existing in an adjoining house over which he has no control.

A clean city must be clean all over, and not merely in spots. To be thoroughly free from the evil consequences of unsanitary conditions, every house should be sweet and wholesome, and not merely every other house or all the houses in a block save one

or two. Contamination spreads from the infected few, instead of health exhaling from the perfect many and redeeming their less happy neighbors. It is entirely safe to say that a house to house inspection in any city by competent and wholly disinterested persons would reveal a state of affairs not only unsuspected, but seriously startling in its character. Passing over the question of slums, in which the abject poor, the hopelessly destitute and the wilfully depraved lead lives of misery and make no attempt at cleanliness, how many who live in comparative luxury, or at least are provided with some of the requirements of this age, know positively that they are breathing perfectly pure air when within the walls of their pleasant homes?

When a fixture gets out of order or a pipe leaks the plumber is called in, and an opportunity may then be given a skilled sanitarian to observe whether anything is out of order in the general plumbing system; but, if no such accident happens to interrupt the even flow of household affairs, is not a slightly disagreeable odor or a strange smell endured if it is intermittent? And when do headaches or slight illness cause suspicion to be directed to the plumbing if there is no overt trouble such as a leak?

A house-to-house inspection would cause a periodic examination to be made of the possible sources of danger, and when a defect should be found its immediate cure might prevent serious or perhaps fatal cases of illness. As the refinements of modern civilization are introduced more and more widely we need to be even more on the alert to guard against the evil effects which may follow in their train.—The Metal Worker.

PLUMBING CONTRACTS.

J. W. Hughes, of Montreal, has the contract for refitting the Bank of Toronto.

E. C. Mount & Co., of Montreal, have received the contract for roofing the Presbyterian Church, Westmount.

J. H. Gardner & Bro., of Montreal, have secured the contract for the plumbing, heating and ventilating of the Amateur Athletic Association building, Point St. Charles.

THIS WEEK'S VISITORS.

The large patronage of the Toronto Radiator Manufacturing Co., Limited, Toronto, may be imagined by taking a look over this long list of names of customers who called on them this week: Mr. Maurice Brooks, ex Lord Mayor of Dublin, and of the Brooks, Thomas Co.; James Kingsley, Montreal, Que.; W. H. Powell, architect, Stratford, Ont.; Wm. Baker, Cedar Rapids, Iowa, U.S.A.; Clarence E. Safford, Buffalo, N.Y.; Thos. Kidd, Buffalo, N.Y.; Mr. Jarecki, of Jarecki Manufacturing Co., Erie, Pa.; W. H. Osborne, superintendent of Jarecki Manufacturing Co., Erie, Pa.; Geo. Mackendrick, Kincardine, Ont.; A. G. Buckham, Brampton, Ont.; Wm. Peaker, of Peaker & Son, Brampton, Ont.; Philip Gies, Berlin, Ont.; Mr. Fairley, of Fairley & Stewart, Hamilton; Mr. McEachren, of McEachren Heating and Ventilating Co., Galt, Ont.; Geo. Millward, Port Hope, Ont.; Mr. McLaren, of E. Russell & Co., London, Ont.; T. Partridge, London, Ont.; W. Smith, London, Ont.; Wm. Skelly, London, Ont.; Wm. Campbell, St. Catharines, Ont.; A. Rodgers, Hamilton, Ont.; R. Paddon and daughter, Windsor, Ont.; Mr. Northwood, of McKinley & Northwood, Ottawa, Ont.; John Plaxton, of Plaxton Bros. Co., Winnipeg, Man.; Mr. McDonald, of McDonald & Werner, Mitchell, Ont.; Geo. Johnson, of Wm. McGie, Belleville, Ont.; Mayor Chas. Cole, Niagara Falls, Ont.; H. Moss, Renfrew, Ont.; W. J. Barrie, Sarnia, Ont.; Wm. Ellis, Sarnia, Ont.; S. P. Gourlay, St. Catharines, Ont.; A. Schinbeiner, Listowel, Ont.; Capt. Robertson, Belleville, Ont.; Mr. Christie, of Christie Bros., Owen Sound, Ont.

BACTERIA IN WATER.

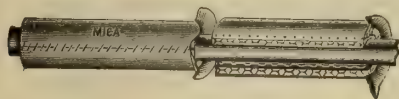
Wm. R. Stokes, M.D., writes an excellent article in the July number of Health Magazine on the subject of "Pure and Impure Drinking Water." He shows how the drinking water of various cities becomes affected by bacteria and mineral impurities, and how the water may be cleaned by filtration and other methods. He speaks highly of sand filtration, as also of electricity and chemicals, as a means of purifying the water. He is of the opinion that bacteria thrive in the drinking water of most cities. Too much care cannot be taken in the methods of purification.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.
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Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory
9 Jordan St., TORONTO, CANADA.

Brushes

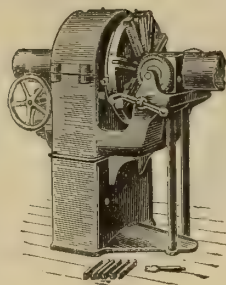
Catalogue
for
1897
Now Ready

MEAKINS & CO. 313 St. Paul Street MONTREAL
and Meakins & Sons, Hamilton.

PITTSBURG PRICES ADVANCING.

THE Pittsburg Commercial Gazette reports as follows: "Pig iron—While the volume of business reported in Bessemer iron was not near as large as that of last week, a little reaction was to be expected, and it always follows heavy buying; for the time furnacemen are well sold and consumers pretty well covered. Prices are firm, but unchanged; while prompt delivery is still to be obtained at \$9.25 to \$9.30 valley furnace, extended deliveries are held at \$9.50 to \$9.60 and large sales have been made at the inside figure for the first quarter of 1898. Consumption is now in excess of production and the stock in first hands is now being depleted, although we are advised of several idle furnaces being put in readiness to blow in. The market has not been so active for a considerable time, and it is worthy of note in this connection that the business is healthy and legitimate: that the principals are the consumer and producer. So far as we can learn, there is an absence of speculation, and it may be noted here that furnace men generally are loth to sell to speculators, who, they aver, are often responsible for demoralizing the market, and they would like if possible to keep them out. Sometimes the speculator is forced by financial necessities to throw his iron upon the market, and the furnaceman, if he wants to sell, has to meet the price made by the former. There have been cases where the

Armstrong Pipe Threading AND CUTTING-OFF MACHINES



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Armstrong Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

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CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS **MOULDED RUBBER GOODS**

H.O. CANFIELD - BRIDGEPORT, CT.

REVISED PRICE LIST.

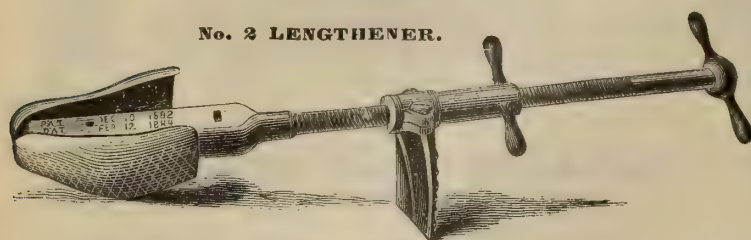
The following revised price list of the Toronto Steel Clad Bath and Metal Co. went into effect on September 1. The quotations show a considerable reduction over the previous prices. The discount remains the same as before:

Plate A—5 ft. and 5 ft. 6 in., No. 2..	\$22 50
B—5 ft. and 5 ft. 6 in. " "	24 00
C—5 ft. and 5 ft. 6 in. " "	38 75
Plate D—12 oz., No. 1.....	26 50
D—14 oz. " ".....	28 70
D—16 oz. " ".....	31 00
Plate E—12 oz., No. 1.....	31 00
E—14 oz. " ".....	33 00
E—16 oz. " ".....	35 00
Plate F—12 oz., No. 1.....	34 00
F—14 oz. " ".....	36 00
F—16 oz. " ".....	38 00
Plate G—12 oz., No. 1.....	49 50
G—14 oz. " ".....	51 50
G—16 oz. " ".....	53 50
Plate H—12 oz., No. 1.....	48 50
H—14 oz. " ".....	50 50
H—16 oz. " ".....	52 50
Plate I—4 ft. 6 in., Roman, 12 oz..	27 00
I—5 ft., " ".....	12 oz.. 29 00
I—5 ft. 6 in., " ".....	12 oz.. 31 00
I—4 ft. 6 in., " ".....	14 oz.. 28 00
I—5 ft., " ".....	14 oz.. 30 00
I—5 ft. 6 in., " ".....	14 oz.. 32 00
I—4 ft. 6 in., " ".....	16 oz.. 30 00
I—5 ft., " ".....	16 oz.. 32 00
I—5 ft. 6 in., " ".....	16 oz.. 34 00

furnaceman has had to compete with his own iron after it passed into the hands of speculators. Forge iron continues quiet, but it is firmer. Sales at \$8.50 Pittsburg and \$8 at valley furnace. Foundry irons continue quiet, with no improvement in prices as yet, but there will no doubt be an improved demand in the near future. A firmer and more active market is reported for ferro-manganese, and prices have been advanced slightly. It is now quoted at \$46 to \$46.50 for domestic 80 per cent. An improved demand for spelter is also looked for, but so far as we can learn there has been no change in prices, which may be quoted somewhere about \$4.22½ to \$4.25 for prime western. There is a continued increasing demand for nearly all kinds of finished material, and prices are strong and generally higher. The mills not only here but in the Mahoning and Shenango valleys, as well as the Wheeling districts, are nearly all in operation, some of them working up to their full capacity, and there is a general disinclination to booking orders for future deliveries at current rates. Large buyers, both jobbers and consumers, realize fully that prices are very low, and are likely to further advance; hence they are anxious to anticipate the future at present rates, and it is not strange, in view of what has been stated, that manufacturers are disposed to hold back. No doubt most any of them will book orders with the understanding that the price is to be the one ruling at the time of delivery, and this is certainly fair enough.

THE KNAPP & COWLES MFG. CO.

BRIDGEPORT, CONN., U.S.A.



Boss Shoe Stretcher.

This Shoe Stretcher is made of the best Malleable Iron and Steel, and will stretch from infants' No. 4 to men's size No. 13; will stretch shoes at any point desired, and also lengthen the shoe.

Prices quoted upon application.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A MEETING of the creditors of Elizabeth H. Potts, general merchant, Little Current, Ont., was held on the 6th inst.

C. F. Gallion, harness merchant, Rossland, B.C., has assigned.

W. R. Lenontine, general merchant, Southampton, N.S., has assigned.

V. St. Pierre, general merchant, Sayabec, Que., is offering to compromise at 40c.

Tremblay & Larouche, sawmill proprietors, Mille Vaches, Que., have assigned.

Mayhew & Farquharson, general merchants, Admaston, Ont., are asking an extension.

George Gregory, sr., sawmill owner, Midland, Ont., has assigned to J. B. Howell, Midland.

A meeting of the creditors of Jane Morley, manufacturer of brick, Toronto, was held on the 3rd inst.

The Thomas E. Howard Co., brass goods, etc., Montreal, have filed a consent of assignment.

Corbeil & Leveille, sash and door manufacturers, Montreal, have compromised at 30 on the dollar.

Moise Mesnard, general merchant, St. Justine de Newton, Que., has assigned to Kent & Turcotte.

The sheriff is in possession of the stock of cement, fire brick, etc., of the Colman Hamilton Co., Limited, Toronto.

PARTNERSHIPS FORMED AND DISSOLVED.

Henderson & Omerod, dealers in lubricating oil, Winnipeg, Man., have dissolved partnership.

A Charpentier & Co., builders, Montreal, have dissolved. Adiard Charpentier and Henri Filiatreault have formed a new partnership.

George McDougall and Joseph Martel have formed a partnership in Montreal to trade as contractors under the style of Martel and McDougall.

John Mullin and Edouard Pinsonnault, general merchants, Waterloo, Que., have formed a partnership to do business as general merchants, under the style of Smythe, Mullin & Co.

SALES MADE AND PENDING.

The general stock of the estate of C. M. Deverell, Ravenshoe, Ont., has been sold.

E. A. Loney, general merchant, Maxville, Ont., has sold his stock at 62½c. on the dollar.

J. B. Boutin, general merchant, Lauzon, Que., has sold his stock at 55c. on the dollar.

The assets of P. G. Miller, general merchant, St. Felix de Valois, Que., were sold at auction on the 9th inst.

N. Mathieu, hardware merchant, Montreal, has sold out.

CHANGES.

Magnan Bros. have started a hardware business in Montreal.

W. G. Johnson, tinsmith, Rat Portage, is opening out in business.

A. Cameron, blacksmith, Staffa, Ont., has sold out to Richard Webb.

Silver Allen, general merchant, Pugwash, N.S., has opened out in business.

D. W. French & Co., general merchants, Sandon, B.C., have been succeeded by H. Giegerich.

Louis Charron, of the firm of J. Bland L. Charron, coal and wood dealers, Montreal, has sold out to J. B. Charron.

H. H. Otton & Son, dealers in stoves and tinware, Barrie, Ont., have been succeeded by J. H. Neelands.

FIRES.

Joseph Woodruff, Sydenham, Ont., has had his grist and saw mill burned.

Thomas Steele & Co., general merchants, Ridgetown, have sustained loss by fire.

The lumber and planing mill of Thomas Smedley, Amigari, Ont., has been burned.

H. Langelier, harness maker, Magog, Que., was burned out. Partially insured.

David Donaldson, Lanark, Ont., has had his planing mill burned. There was no insurance.

A. D. Martin, carriage maker, etc., Magog, Que., was burned out. Partially insured.

DEATHS.

Joseph Hines, blacksmith, Noel, N.S., is dead.

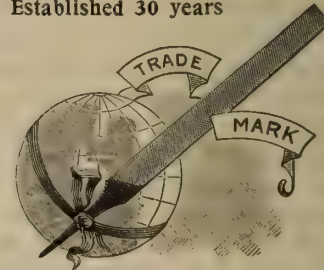
Robert Mitchell, of the Robert Mitchell Co., Limited, brass founders, Montreal, is dead.

Globe Files and Rasps

ARE THE STANDARD.

Made from the very best grades of Crucible Cast Steel, and every file and rasp stamped "GLOBE CO." is warranted, and should a file of our make prove unsuitable for the work for which it is required we will cheerfully replace the same on application.

Established 30 years



LARGEST { **DEMAND
PRODUCTION
VARIETY
STOCK**

For sale by all the leading Hardware Merchants in the Dominion, from Halifax, N.S. to Victoria, B.C.

Prices Always Right

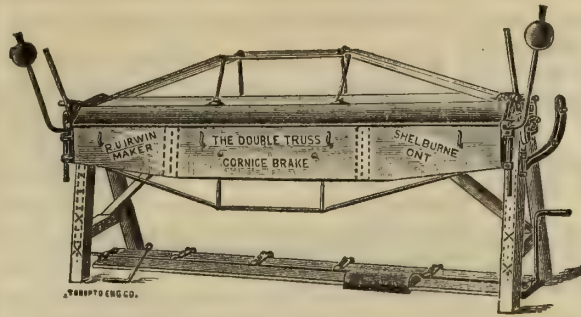
EMERY WHEEL MANUFACTURE.

VERY few people are aware of the system of construction of emery wheels. There are four different stages through which the small grain of emery travels before it is turned out ready for use. It first enters the mixing room where it is weighed out in quantity according to the size of wheel required. After mixing the material, which is then in a plastic form, it is put into metal rings somewhat larger than the wheels should be when finished. A plaster of Paris wheel or bat is under the ring so that the water from the material will quickly be absorbed. When this operation is completed, the wheels are put into the drying room, where they are left for a number of hours. They are then transferred to another drying room where the temperature ranges still higher. The wheels are held together by a material called "bond." Their hardness depends upon the proportions of the various constituents of this bond as well as upon the length of time they are burned in the kiln. In making up the wheels it is customary to mix together at once enough of the substances entering into their composition to suffice for several sizes of the same grade and grain. Emery, water and the materials to form the bond are put into large tanks holding about fifteen hundred pounds each and are well mixed by hand for several hours.

When they have been thoroughly dried they are taken into the shaving room. The machines operated here are known as jiggers, and with them the wheels are trued and cut down to nearly their proper size, allowing only enough for contraction while being burned. After this has been done they are in condition to be put into the kilns.

The wheels have to be carefully packed in the kiln on clay bats, with fire clay rings around each, so as to ensure their being burned evenly. They are then submitted to a heat of nearly 2,500 degrees Fahr. for from sixty to eighty hours. After burning it requires fully forty-eight hours for the kiln to cool sufficiently to permit the removal of the wheels. They are then turned so as to be made the size desired and also to be made true.

A blower is then used to remove all dust resulting from the truing operations. All wheels are bushed with lead before leaving the factory and are taken to the testing room, where they are run at a speed of more than double that for which they are recommended. This is done as a precaution against the breakage which might result from a latent crack or flaw. They are tested by experts to see if their grade is correct for the work for which they are intended, as great care has to be exercised in this respect. The wheels are then labeled and are ready for packing and shipment.



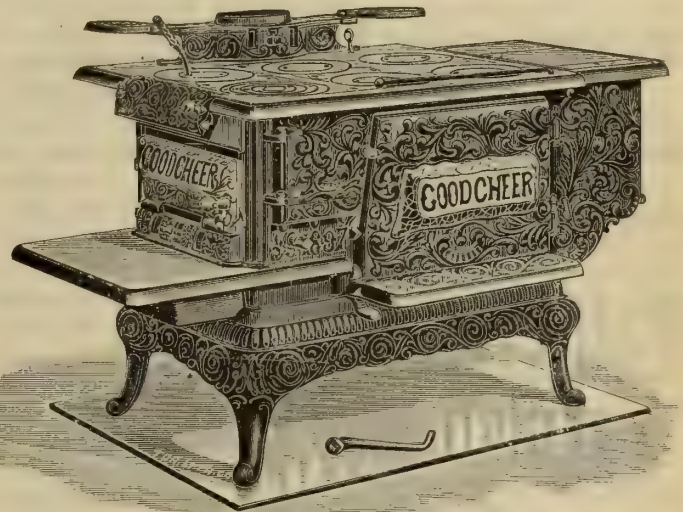
\$50 for an 8-foot Cornice Brake. Bends 20-gauge iron or lighter, straight and true its entire length. Sent on trial if desired. Also 8-foot Bearer for \$12—the handiest made. Send for circular to

The Double Truss Cornice Brake Co. SHELBURNE, ONT.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

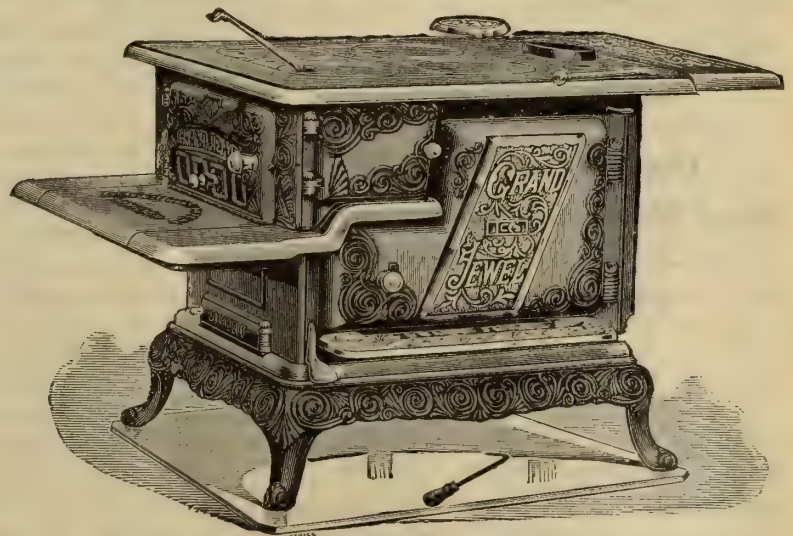
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD and for COAL.

With Patent One-piece Cold-rolled

SHEET STEEL OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and Western Territories

Merrick, Anderson & Co.,

WINNIPEG.

Agents for the Province of Quebec, Nova Scotia New Brunswick and Prince Edward Island.

W. L. Haldimand & Son,

MONTREAL

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

A NEW STOVE THAT SAVES COAL.

DAVID SMITH is a canny Scotchman with a Yankee turn of mind in the matter of economy and thriftiness, says The Wright County Monitor. For several years he has devoted a good deal of thought to obtain more heat from an ordinary heating stove and at the same time effect a saving in coal. As a result of his cogitations he had holes drilled in the top and bottom of a soft coal burner of sufficient size to admit of inserting a 3-inch tube, taking out one part of the grate to admit it. He then put in an ordinary supply of coal and started the fire. His expectations were more than realized, the stove having three times the heating capacity it did before, with less than one-third the amount of fuel. The secret of more heat and less fuel is just this: The tube referred to is open at the bottom, affording a cold air draught, which not only forces the heat up through the tube from the centre of the fire, but also serves the purpose of a hot air blast used in connection with furnaces, which causes the coal to burn slowly and at the same time utilize every particle of heat. If it is desired to heat more than one room, all that is necessary is to attach one piece of pipe to the top of the tube that passes through the stove. Mr. Smith says that last winter he warmed three rooms in this way, and that in doing so he did not use over two-thirds the amount of coal he had previously used for warming one room by the same stove. The invention is unquestionably a good thing and can be added to an ordinary soft coal heater at a trifling expense.

MANUFACTURING HAIRPINS.

For ages the English and French controlled the manufacture of hairpins, and it is only within the last 20 years that the goods have been produced in other countries to any extent. The machinery used is of a delicate and intricate character, as the price at which the pins are sold necessitates the cheapest and most rapid process, which can only be secured by automatic machines.

The wire is made expressly for the purpose and put up in large coils, which are placed in a clamp and so carried to the machine while being straightened. This machine cuts, bends, and by a delicate instantaneous process sharpens the point. Running at full speed, it will turn out 120 hairpins every minute. To economize, it is necessary to keep the engine going day and night.

The difficult part of the work is in the enameling, which is done by dipping the pins in a preparation and baking in an oven. It is here that the most constant and careful attention is required, as the pins must be absolutely smooth and the enamel have a perfect polish. The slightest particle of dust causes imperfections and roughness.—Pearson's Weekly.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL

TORONTO



Ontario Nut Works, Paris

BROWN & CO.

Manufacturers of

All sizes of Hot Pressed Nuts, Square and Hexagon



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works
Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
HESPELER, ONT.**

Good Advertising

For Wide Awake Retailers

By F. James Gibson.

From the Dry Goods Review.

IN connection with the Good Advertising Department we have opened a Criticism Department and a Question Drawer Department. Knowing the great importance to the retail dealer of good advertising, and desiring to help our subscribers to become good advertisers, we have secured the services of Mr. F. James Gibson. Mr. Gibson, who is one of the leading advertising experts of the day, will be ready to answer all questions relating to advertising sent to our question drawer. He will also criticise any advertisements sent for that purpose and give the benefit of his advice on advertising subjects generally.

It is also our desire that our readers will help along this good work by sending to us for publication any advertisements which they have found to be particularly good for drawing business. In this way this department of The Dry Goods Review will become a sort of clearing house for good advertising, and we will be helping one another to better things in the way of advertising.

The services of Mr. Gibson are entirely free to our subscribers.

Good advertising will not, in itself, make a retail business successful—it is only one of several things necessary to success. Good buying, good selling, good store management and able financing are each as important as good advertising, and no dealer is likely to succeed in these days of keen competition without all these five aids to success.

But what is good advertising? Advertising, in the commercial sense, has for its ultimate object the selling of something. Good advertising is that which accomplishes this result economically and well. It was the complaint of the young general, Bonaparte's, opponents that he did not fight his battles according to the rules of war as then understood. Napoleon's reply to this, when he heard of it, was: "But I win battles." Good advertising is something like good fighting, and the man who "gets there" probably is the one who doesn't lie awake nights thinking about rules. But for all this, war, as usually carried on, is a science, and the man who has studied it the most and knows most about its fundamental principles has, other things being equal, the advantage of his opponent.

* * *

It is a well-known fact that only a very small percentage of business men succeed in business. How many of the vast number of commercial wrecks which dot Canada (and all other countries) from end to end are due to a lack of knowing how to advertise? It is, of course, impossible to know. It is safe, however, to say that there is no branch of business effort more necessary for success to the retail dealer to-day than is advertising. A dealer who does not know how to secure the publicity necessary for his business is badly handicapped. There are at the present time throughout Canada thousands of retail dealers who are doing nothing more than making both ends meet. And yet these men have success quite within their grasp except for one thing: They don't know how to advertise. They'll die poor men. These men are, as I

know from experience, keen and careful buyers. They are good salesmen also and attentive to their customers' wants, as well as economical in their expenditures. So far as their business gives them play, they are also good financial managers. But there is something lacking somewhere. Nine times out of ten the thing lacking is good advertising. These dealers either refuse bluntly to advertise at all, saying they don't believe in it, or else they go about it in such a haphazard, half hearted way that no good can come of it. In the meantime, the business that perhaps properly belongs to them goes to some big department store or other place of business which advertises. By-and-bye the day of awakening comes, and they all start in and kick the man who advertises. But he can stand it; he has the business.

* * *

The department store question, which has lately been so extensively discussed in Canada and in other countries, is very closely allied to this subject of good advertising. The great growth during the past 25 years of the daily newspaper press has put a powerful instrument of warfare into the hands of the aggressive and enterprising dealer, and he has not been slow to avail himself of it. Without the daily papers the great department stores could not exist. It is clear, then, that they owe much of their success to advertising. What are you going to do about it, Mr. Retailer? Are you going to let your business be gobbled up and yourself be reduced to the rank of a clerk? There may be a remedy for you in the careful perusal of this good advertising department each month. In the meantime just bear this in mind: Good advertising is the bridge that has carried many a successful man over the river.

* * *

Of course, not one dealer in a hundred knows how to do good advertising, but the trouble is that most of them think that they know it all. They freely and frankly admit that they don't understand law or medicine. The average grocer will confess that he knows nothing about dry goods or hardware, or, indeed, about any other business but his own. And so with the average man in other lines of trade. But get these people on the subject of advertising and it is surprising how much they think they know about it. And yet advertising is as much a science as medicine or law. There are certain fundamental principles that underlie the art of advertising.

To be a successful advertiser it is as necessary to understand these fundamentals as for a doctor or lawyer to understand the fundamentals upon which their respective professions are builded. To be a good advertiser it is clearly necessary, then, to learn the business. To most advertisers this learning process has been a very expensive one. But this is an age of progress, and there are other ways of learning than through the bitter school of experience. Advertising has to-day its teachers and exponents in colleges and universities, as well as among a number of really excellent publications devoted entirely to the science of publicity. It is also one of the most useful provinces of trade journals to teach its underlying

principles to those of their readers who are willing to lend an attentive ear. There are also advertising experts whose services can be procured in the most instances for a very moderate cost. The dealer who is really anxious to acquire information regarding this most important subject will find no great difficulty in obtaining it.

* * *

About the very first snag the novice runs up against is the advertising fakir. The woods are full of these fakirs, and the schemes they spring on the unwary are almost like the stars of heaven in multitude. It is safe to say that one-fourth to one-third of the amount spent in advertising in Canada and the United States is thrown away on useless schemes. And most of this vast sum of money is squandered on these same fakirs. The advertising fakir, for the sake of convenience, we will divide into two classes. First, there is the fellow who knows that he has a fake scheme. Then there is the man who really thinks (perhaps) that he has a good thing. But it all comes to the same thing in the end, so far as the victim is concerned—his money is gone where it will do him little or no good. The safest plan is to have nothing at all to do with an advertising scheme, no matter who presents it. If the devil, when he tempts us, were always to appear with cloven hoofs and horns and the smell of sulphur, we would easily know him for the devil and be on our guard. It's the same way with the advertising fakir. If he were to come to us with a sign outside of the front of his hat reading: "I am an advertising fakir, beware of me!" we would not often be fooled. But when he, like the devil, appears as an angel of light we are in a dangerous position. It may be easy for us to turn the cold shoulder to the man who wants to sell us space in a hotel register, or who maybe has a scheme for sending up a balloon laden with circulars, which, at certain intervals, are to be cast forth to the earth, or he perhaps has some other equally attractive (?) plan for coaxing money out of our pockets. But when a church fair or a picnic programme comes along and we are requested by one of our best customers to take a \$5 or \$10 space in it, what are we to do? If we are wise we will refuse. I don't believe that any advertiser ever yet traced one dollar's worth of business to this kind of advertising. And yet thousands of intelligent dealers spend most of their advertising appropriations in just such schemes as these. They think that they are smart business men and good advertisers, when, at most, all they have done is to gain the favor of two or three individuals. In the meantime the great public all around them remains in blissful ignorance of the bargains they

are, very prevalent. Mr. Warren is doubtless an enterprising man, seeing that he advertises, but he will never make any money out of advertisements like this. And yet, take up almost any paper you like, you will find shrewd and intelligent men spending their money in just this way. And the worst of it is that they think they are

Down Goes Goods

Down goes the price of goods at the Beaverton Woolen Mill. To meet the low price of wool we have made a bona fide reduction in the price of all woolen goods.

Pure all-wool, two and three-ply skined yarn at 37½c. per pound. A good pair of double blankets for \$3.25, Flannel and Tweed at correspondingly low prices and 2c. per pound extra for all wool exchanged for goods.

Bring your WOOL to the Beaverton Woolen Mill.

Beaverton, June 15th, 1897.

C. T. YOUNG, Beaverton.

advertising. This Beaverton ad. has all the earmarks of a "standing" ad.—one of those kind which is changed every six months or thereabouts. Who is responsible for this kind of advertising? The publishers of the papers in which they appear, as much as anyone. The space occupied by Mr. Warren's ad. might be made of real value if some specific article, with the description and the price attached to it, had been placed there. As it is, when Mr. Warren finds out that his advertising doesn't pay him, he will probably order it discontinued, and the paper will lose a customer. But Beaverton is not without its advertising genius. Here is an advertisement of C. T. Young's, which is about something in particular and which will surely sell goods, provided the prices are low enough. Mr. Young is a man who evidently knows very little of the Queen's English, and yet there is ten times as much horse sense in his ad. as there is in the Warren ad. This simply shows how much better horse sense is than a knowledge of grammar, when it comes to practical business.

Now, here is an ad. that has plenty of horse sense in it and all the grammar that's necessary. The man who wrote it knows how to pen an advertisement.

He also knows a good deal about how an ad. should be set up typographically.

Notice the other strong points of this advertisement. The language is simple and modest; it is therefore convincing. It gives you something definite about shirt waists and linens, and leaves the impression on the mind that back of these things there are plenty of other bargains awaiting the customer who steps into "The White House."

Here's another Stratford advertisement which narrowly escapes being one of the best that could be written. In fact, so far as it goes, it really could not be improved upon. As an introduction to

The Leading Furniture and Undertaking House

If you want
CHEAP and GOOD

Furniture!

Just call and get our prices. If you want a Good Set of

PARLOR FURNITURE,

In which there is no deception and will last a life time, call on

JAS. B. WARREN,
BEAVERTON.

have to offer. The result is that the department store man, or some other fellow who knows how to advertise in the right way, gets the business. And probably too, Mr. Dealer, he gets the business of the very woman to whom you gave that \$10 contract for space in the church fair programme last week.

Here is an advertisement taken from a Beaverton paper which seems to have pretty much all the

bad points in it which it is possible to get into an ad. I have purposely selected it as an example of a kind of advertising which

DUGGAN'S

STRATFORD, Tuesday, Aug. 17, 1897.

August Store Talk.

We ought to make more noise with our array of bargains, do more talking about the exceptional values we have to offer these last days of summer selling, but we don't. Simple facts suffice, enough to know that what you see advertised you can buy.

The Last of the Shirt Waists.

- 1 dozen only, good quality Print and Muslin Shirt Waists, in white and colored. They go at 25c.
- 3 dozen only, best quality Cambric Shirt Waists, in stripes with white collar. Were 75c They go at 50c.
- 3½ dozen only, the season's best, were selling at 95c, \$1.15 and \$1.30. They go at 75c.

Special Linen Sale.

Including Fine Damask Tableings (bleached and unbleached), Table Napkins, Towels, Towellings, Sideboard Drapes, Centre Pieces, Tray Cloths, etc.

You'll find it to your advantage to buy here when you compare prices and quality.

The White House.

We Seek

a larger result than mere notoriety. We mean to have it understood that this is a first-class clothing store. Not only because one's money goes farthest here, but also because the things we sell are new and stylish and right.

Our name already stands for a certain forwardness in trade. We mean to have it stand for thoroughness in every way. Everything belonging to summer will sell now, regardless of cost, for the sake of clean stocks. We carry nothing over, never do! and nothing makes us more in favor to-day than the fact that everything is new and thoroughly up-to-date.

No use of startling prices and panicky advertisements. Present values are unquestionably the best ever offered. See for yourself.

**Thornton
& Douglas**

STRATFORD and GUELPH.

a quantity of prices and other detailed information it leaves nothing to be desired. If the last paragraph had been omitted and a dozen, say, of specific clothing items run in instead of it, it would have been better. Once in a while an advertisement of glittering generalities is all right, but as a steady diet it is not "in it" with the ad. that gives something definite in the way of prices and other particulars.

The accompanying advertisement of Knox, Morgan & Co.s, which has been reduced from a full page ad. in The Review, is, of course, not a retailer's ad. but its faults are the faults of many retail

it. Now, an advertisement to which no business can be traced is not the right kind of an advertisement. A business house which does much of this kind of advertising is taking great chances. For

all it knows it may be throwing its money away. This is not good business. If I were doing the advertising of Messrs. Knox, Morgan & Co. I would take some specific article of dry goods and advertise it by itself. I would show a cut of the article where possible. I would also tell the price. In the absence of a cut I would give a written description. I would change the article for each issue of the journal used. I have tried this plan for a large wholesale house and it works very successfully. Of

Knox, Morgan & Co.

Wholesale Dry Goods

HAMILTON

OUR representatives are now covering Western Ontario, Manitoba and Northwest Territories with a collection of carefully selected samples which for value and style will interest all merchants.

The stock will be well forward by middle of July, and we respectfully solicit an inspection of the values now offering by our representatives, and a share of your FALL ORDERS.

Customers know that we fill orders in rotation, and that goods are shipped promptly and equal to samples.

During the warm summer days we shall be pleased to have want lists by mail.

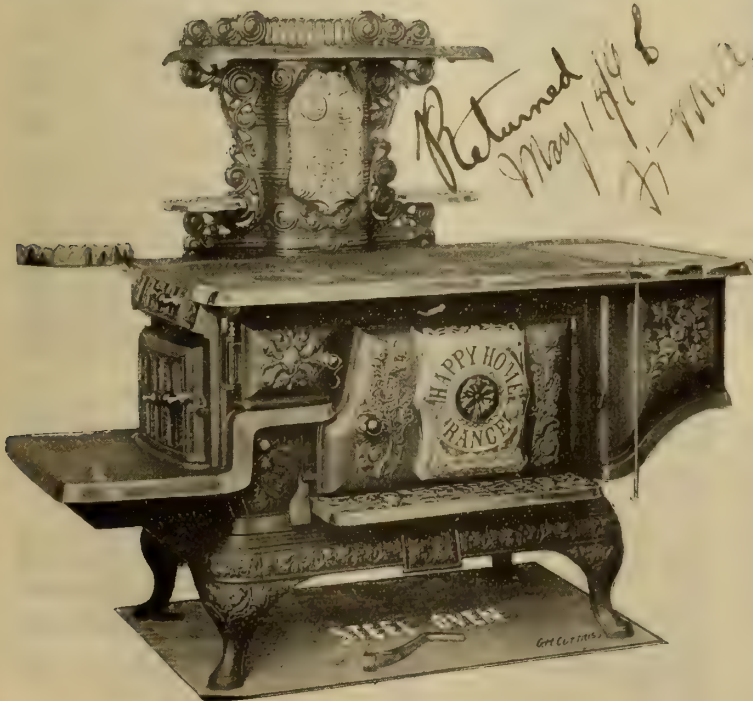
LETTER ORDERS

FILLED WITH PARTICULAR ATTENTION.

course, where competition is very keen the average jobber does not feel like giving his prices away to his competitor. But almost every house of any importance has certain lines of goods which no one can beat for values. These are the kind to use in an advertisement. Besides, business got in this way costs less to get than through a traveling salesman.

ads., and they are surely glaring enough. This advertisement, while a model of dignity and straightforwardness, is so general in its nature that it would be almost impossible to trace any results to

Moore's "HAPPY HOME RANGE"



~ 1897 ~

Nothing

will increase your business more or make your success more permanent than to

Satisfy your Customers

You can sell the "Happy Home Range" with every assurance that your customer will be thoroughly satisfied.

"THE HAPPY HOME"

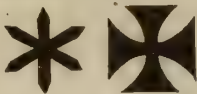
possesses many features of utility and convenience not found in other ranges.

IT IS up to date,
a beauty in appearance,
economical on fuel,
perfect in operation,
made in all desirable styles
and sizes.

SAMPLE ORDERS SOLICITED.

Mfd. by... **THE D. MOORE CO. Limited** - **HAMILTON, CAN.**

CORPORATE MARK



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS

TORONTO, Sept. 10, 1897.

These prices are for such quantities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 00
Straits

Tin Plates.

Charcoal Plates—Bright.

J. L. S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. 6 25
I.X.X. 7 50
J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X. 4 25
I.X.X. 5 00
I.X.X.X. 5 75
D.C., 12½x17 3 00
D.X. 3 75
D.X.X. 5 75
NOTE.—Other brands might be shaded by 25c per box.

Bessemer Steel—

I.C., usual sizes 3 00
I.C., special sizes, base... 3 15
20x28..... 6 25
Charcoal Plates—Terne.

Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 1 80
I.X., Orion 8 00
Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs }
" 14x60, " } 0 05½ 0 06
" 14x65, " }

Tinned Sheets.
26 " 0 06½ 0 06
28 " 0 07¼ 0 07½

Iron and Steel.

Common Bar, per 100 lbs. 1 55
Refined " 1 80
Horse Shoe " 2 00
Band " 2 00
Hoop " 4 00
Swedish " 4 25
Sleigh Shoe Steel " 2 50
Tire Steel " 2 50
Machinery " 2 75
Cast Steel, per lb. 0 10
Russian Sheet, per lb. 0 10½
Tank Plates, 1-5 and thicker. 2 00
Boiler Rivets 4 50

Boiler Tubes.

1½ inch 0 06½
2 " 0 07½
2½ " 0 09½
3 " 0 11

Steel Boiler Plate.

½ inch 2 45
¾ inch 2 35

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier..... 2 50
18 to 20 gauge 2 25
22 to 24 " 2 25
26 " 2 35
28 " 2 45

Canada Plates.

All dull, 52 sheets 2 40
Half polished 2 45
All bright..... 2 85

Iron Pipe.

Wrought, ¼ to ¾ inch, 1½c.; ½ inch, 2 1-5 to 2½c.; ¾ inch, 2.65 to 2.70c.; 1 inch, 3.60 to 3.65c.; 1¼ inch, 4.85 to 4.95c.; 1½ inch, 6.20 to 6.30c. 2 inch, 8.35 to 8.50.
Galvanized, 60 per cent.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per
16 gauge..... 0 03¾
18 to 24 gauge..... 0 03¾
26 " 0 04½
28 " 0 04¾

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50
" 5-16 " " 4 75
" 7-16 " " 3 75
" 9-16 " " 3 25
" 1-1 " " 2 85
Trace, per doz. pairs..... 3 60
German coil, per 100 ft. 1 65
Jack chain, iron, single, per doz. yards..... 0 13
Jack chain, double, per doz. yards 0 15
Jack chain, brass, single, per doz. yards 0 20

Copper.

Ingot.

English B. S., ton lots 0 11½
Lake Superior.....

Bolt or Bar.

Cut lengths, round, ½ to ¾ in. round and square 1 to 2 inches... 0 18
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60 0 15
Untinned, 14 oz., and light, 16 oz., irregular sizes..... 0 15
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.

Planished and tinned, 14x48 and 14x60 0 25

Braziers. (In sheets.)
4x6 ft. 25 to 30 lbs. ea., per lb. 0 17
" 35 to 45 " " 0 15½
" 50 lb. and above, " 0 15

Boiler and T. K. Pitts. 0 21
Spun, per lb..... 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12½ p.c. off list.
From 20 gauge up, 12½ p.c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c. off list.
neets, hard-rolled, 2x4 ft... 0 20

Foreign, per lb. 0 04½

Domestic " 0 03¾

Zinc Sheet.

5 cwt. casks 0 05½
Part casks..... 0 05½

Lead.

Imported Pig, per lb. 0 03½
Domestic, per lb. 0 02¾

Bar, 1 lb. 0 04½
Sheets, 2½ lbs. sq. ft., by roll. 0 04½

Sheets, 3 to 6 lbs., per sq. ft., by roll..... 0 04

NOTE.—Cut sheets ½ cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half 0 11
Standard 0 10½

Wire 0 17
NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb. 0 09
Other makes, per lb..... 0 08

Anti-Friction Metal.

"Beaver" brand \$0 20
"Tandem" A. 0 19
"B. 0 16
"C. 0 10½

White Lead.

Pure, Assoc. guarantee, ground in oil, 25 lb. irons 5 35
No. 1 do 4 97½
No. 2 do 4 60
No. 3 do 4 22
No. 4 do 3 85
Brandram's B. B. Genuine 6 35
"Decorative 6 15
"No. 1 5 55
"No. 2 4 85
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine..... 6 70
No..... 6 20

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)
Pure, per gallon..... 1 00
Second qualities, per gallon... 0 90
Barn (in bbls.) 0 70
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb. 0 07
Chrome Yellow 0 11
Golden Ochre 0 06
French " 0 05
Marine Black 0 09
Green..... 0 09
Chrome " 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe 1 35
Yellow Ochre (J.F.L.S.) bbls. per cwt 2 75
Yellow Ochre (Royal), per cwt 1 10
Venetian Red (best), per cwt. 1 80
English Oxides, per cwt..... 3 00
American Oxides, per cwt. 1 75
Canadian Oxides, per cwt..... 1 75
Burnt Sienna, pure, per lb. 0 10
do. Umber, " 0 10
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03½

Ultra marine Blue in 28-lb. boxes, per lb. 0 08

Fire Proof Mineral, per 100 lb. 1 00

Genuine Eng. Litharge, per lb. 0 07

Mortar Color, per 100 lb. 1 25

James' Gen. Red Lead, 100 lb. 0 04½

Pure Indian Red, No. 45, lb. 0 08

Whiting, per 100 lb..... 0 50

Paris Green

Casks 0 13½
50-100 lb. kegs..... 0 14
25-lb. irons... .. 0 14½
-lb. Boxes 0 15

Sulphate of Copper

Casks, for spraying, per lb..... 0 04½
100-lb. cases, do. per lb..... 0 05

Putty

Bladder in bbls., per 100 1 75
Bulk " 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish..... 0 65
Extra do. 0 90
Denar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish..... 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net..... 0 42
Boiled, per gal. net..... 0 45
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net..... 0 42
Outside points 2c. more.

Castor Oil.

In cases, per lb. 0 09½
Smal lots..... 0 10½

Cod Oil.

Cod Oil, per gal..... 0 50
0 55

Glue.

(In bbls.)
Common 0 07½
French Medal..... 0 10
Cabinet, sheet 0 11
White, extra 0 16
Gelatine 0 22
Strip 0 16
Coopers 0 19
Al clear..... 0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent. off list; Munn's, discount 25 to 30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent. Amer.
Central Fire Cartridges, pistol sizes, Dom. 30 per cent.
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent. Amer.
Loaded and empty Shells, "Trap and Dominion" grades, 25 per cent. Rival and Nitro, 17 p.c.
Shot.
Canadian, common, 15 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin

	per lb
Best thick white felt wadding, in ½-lb bags.....	1 00
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25
Thin card wads, in boxes of 1,000 each 8 gauge.....	0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M
11 and smaller gauge.....	0 60
9 and 10 gauges.....	0 70
7 and 8 gauges.....	0 90
5 and 6 gauges.....	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge.....	1 15
9 and 10 gauges.....	1 40
7 and 8 gauges.....	1 65
5 and 6 gauges.....	1 90

Anvils.

Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10

Augers.

Gilmour's, discount 65 p.c. off revised list.	
Hollow Stearn's, per dozen.....	13 00 20 00
Adjustable Stearn's, each.....	5 50 6 50
Post-hole, Vaughan's, each.....	1 35 1 60
Excelsior, Jennings's, discount 50 per cent.	

Awls.

Sewing, per gross.....	0 65 1 59
Pegging, ".....	0 65 1 25
Brad, ".....	0 85 1 60
" handled, per gross.....	3 60 30
Saddler's, per gross.....	0 45 1 60

Awl Hafts.

Patent Peg, oss.....	7 25 8 00
" Sewing, per gross.....	

Awl and Tool Sets.

Millar's Falls, per doz.....	2 80 3 30
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AXES.

Splitting Axes.....	5 25 5 50
Chopping Axes—	
Black Prince.....	7 25 7 50
Forest Clipper.....	7 25 7 50
Lance.....	8 50 9 00
Mann's.....	8 00 8 25
Maple Leaf.....	9 50 10 00
Hand Made.....	7 50 7 75
Climax.....	8 00 8 25
Phantom.....	8 25 8 50

Axle Grease.

Per gross.....	6 00 13 00
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Bath Tubs.

Zinc, discount.....	3 90 4 0
Copper, discount, 40 and 10 p.c. off revised list	
Steel clad, 20 per cent. discount off revised list.	

Boxing extra

Bells.

Brass, 60 per cent.	
Nickel, 55 per cent.	

Door.

Gon Sargent's.....	5 50 8
" Peterboro', discount 50 per cent.	

Cow.

American make, discount 66½ per cent.	
Canadian, discount 45 and 50 per cent.	

Farm.

American, each.....	1 25 3 00
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House.

American, per lb.....	0 35 0 40
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Bellows.

Hand, per doz.....	3 35 4 75
Moulders, per doz.....	7 50 10 00
Blacksmiths', discount 60 per cent.	

Belting.

Extra, 40 and 10 per cent.	
No. 1, leather, discount 60 per cent.	
Standard, 55 per cent.	
Agricultural, 65 and 5 p.c.	

Bench Stops.

Per doz.....	5 00 6 00
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Bits.

Gilmour's, discount 65 and 5 per cent.	
Excelsior, discount 60 per cent.	
Rockford Common, 65 to 65 and 5 per cent.	
" Perfection, 50 and 10 per cent.	
Jennings' Gen., net list to 5 p.c. discount.	

Car.

Gilmour's, 47½ to 50 per cent.	
Expansive, per cent.	
Excelsior, 10 per cent.	

Gimlet.

Clark's, per doz.....	0 65 0 90
Diamond, Shell, per doz.....	1 00 1 50
Nail and Spike per gross.....	2 25 5 20

Blind Rollers.

Annex, per doz.....	1 25 1 75
Mascott, ".....	1 35 1 85
Erminie, ".....	1 12 1 20

Blind and Bed Staples.

sizes, per lb.....	0 7½ 0 12
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Bolts.

Carriage, dis., 70 p.c. off new list	
Tire, dis., 70 and 5 per cent.	
Stove dis., 70 per cent.	
Elevator, dis., 35 to 40 per cent	
Machine, dis., 70 p.c.	
Coach Screws, dis. 80 p.c.	

Boring Machines.

Complete, with augers, each.....	5 00 7 50
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Braces.

Barber's.....	6 00 7 75
Barber's Ratchet.....	10 00 11 00
Farmers.....	2 00 2 75
Har's Falls.....	15 50 29 00

Brackets.

Shelf.

Japanned Canadian, per doz.	
pairs.....	0 50 3 40
Berlin Bronze Canadian.....	0 85 3 20

Broilers.

Light, dis. 65 to 67½ per cent.	
Reversible, dis. 65 to 67½ per cent.	
Vegetable, per doz., dis. 37½ per cent.	
Henis, No. 8, ".....	6 00
Henis, No. 9, ".....	7 00
Queen City ".....	7 50 10 00

Butchers' Cleavers.

From 8 to ch, per doz.....	4 23
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Butts.

Wrought Brass, dis., 17½ p.c. revised list.	
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Cast Iron.

Loose Pin, dis. 70 per cent.	
Wrought Steel.	
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.	
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.	
Berlin Bronzed, dis. 70, 70 and 5 per cent.	
Gen. Bronzed, per pair.....	0 40 0 65

Can Openers.

Acme, per gross.....	9 00 10 00
Sardine Scissors, per doz.....	3 75 4 50

Card.

Horse, per do.....	0 60 1 00
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Carpet Stretchers.

American, per doz.....	1 00 50
Bullards, per doz.....	6 50

Carpet Sweepers.

Bissell, per doz.....	22 50
World, ".....	21 75
Daisy, ".....	24 00
Star.....	18 00
Crown Jewel, per doz.....	29 00
Grand Rapids, ".....	24 00 33 00

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57½ per cent.	
Plate, dis. 52½ to 57½ per cent.	

Cattle Leaders.

Nos. 31 and 32, per gross.....	8 50 9 50
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Cement.

Canadian, Portland.....	2 50
English.....	2 50
Belgium.....	2 35
Canadian hydraulic.....	1 10

Figures are for barrel lots.

Chalk.

Carpenters' Colored, per gross.....	0 45 0 75
White lump, per cwt.....	0 60 0 65
Red.....	0 05 0 06
Crayon, per gross.....	0 14 0 18

Chisels.

Socket, Framing and Firmer.	
American, dis. 75 to 77½ per cent.	
Canadian, dis. 50 and 10 per cent.	
Tanged firmer, per doz.....	0 85 4 00

Churns.

Daisy or Leader, dis. from stock or factory,	
60, 10 and 10 per cent.	
Steel, net.....	3 00

Clamps.

Judds', dis. 20 per cent.	
stearns, per doz.....	3 00 10 00

Clips.

Axle dis. 65 per cent.	
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Coffee Mills.

Box.....	3 60 13 00
Side.....	3 60 4 00
Enterprise, No. 0.....	1 35
No. 2.....	70

Compasses, Dividers, Etc.

American, dis. 62½ to 65 pe cent	
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Cradles, Grain.

Canadian dis. 25 per cent.	
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Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.	
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.	

Door Springs.

Torrey's Rod, per doz..... (15 p.c.)	2 00
Coil, per doz.....	0 88 1 60
English per doz.....	2 00 4 00

Draw Knives.

American, dis. 70 and 10 per cent.	
Canadian, dis. 25, 50 and 10 per cent.	

Drills.

Hand and Breast.	
Millar Falls, per doz.....	16 00 51 50
P. S. & W., dis. 40 per cent.	

DRILL BIT.

Morse, dis. 37½ to 40 per cent.	
Standard, dis. 50 to 50 and 5 per cent.	

ELBOWS.

Stovepipe.	
Per doz.....	75 1 70

FAWCETS.

Cork Lined, per doz.....	0 30 0 35
Wine, per doz.....	1 30 3 25
Star.....	2 80 3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70
Petroleum, per doz.....	4 50 6 50

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.	
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.	
Black Diamond, 50 and 10 per cent. to 50	
10, 5.	
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.	
Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.	
Heller's Horse Rasps, 50 per cent.	
Jowitt's, English list, 25 to 27½ per cent.	
American, 60 to 60 and 5 per cent.	
Great Western, 60 and 10 per cent.	

FLUTING MACHINES.

Each.....	0 60 2 00
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FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.	
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FREEZERS

Ice Cream.

Gem, from \$1.25 to \$7 net.	
White Mountain, dis. 50 p.c.	
Arctic, dis. 50 p.c.	

FRUIT PRESSES.

Henis', per doz.....	3 25 3 50
Enterprise, dis. 10 per cent.	
Shepard's Queen City, dis. 15 per cent.	

FRY PANS.

Acme, dis. 65 to 67½ per cent.	
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GAUGES.

Marking, Mortise, Etc.	
Stanley's, dis. 50 to 55 per cent.	

Wire Gauges.

Winn's, Nos. 26 to 33, each.....	1 65 2 40
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GLASS.

Window.

Box Price.	
Star.	
Double Diamond.	

	Per 50 ft.	Per 100 ft.	Per 100 ft.
Under 25 Inches.....	1 30	2 50	3 50
26 to 40.....	1 40	2 70	4 00
41 to 50.....	3 00	4 00	4 50
51 to 60.....	3 30	5 00	5 00
61 to 70.....	3 60	5 50	5 50
71 to 80.....	4 00	6 25	6 25
81 to 85.....	4 50	7 25	7 25
86 to 90.....	5 00	8 25	8 25
91 to 95.....	5 50	9 25	9 25
96 to 100.....	6 00	10 75	10 75
101 to 105.....	6 50	12 25	12 25
106 to 110.....	7 00	14 25	14 25

GLUE POTS.

Tinned, each.....	0 30
Enamelled each.....	0 55

GRINDSTONE FIXTURES

P. S. & W., per doz.....	3 30 4 00
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HAMMERS.

Nail

Maydole's, dis. 5 to 10 per cent.	Can., dis.
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KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. set not to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, Lor T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50

Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.

Russell & Erwin, per doz. 1 75 7 50

Cabinet.

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00

Scandinavian, " 1 00 2 40

Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.

Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25

No Name Metal, " 18

Mystic Metal, " 08

F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50

Carpenters', hickory, per doz. 1 25 3 75

Lignum Vitae, per doz. 3 85 5 00

Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00

American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.

German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85

f.o.b., Toronto, Montreal, Hamilton

London.

Cut Nails (Steel). Add 10c. to the prices in

list for iron nails.

Wire Nails, basis, \$2.04 delivered Toronto,

Hamilton, London. Terms, 4 months or

3 off and 30 days; delivered in lots of 10

kegs or more.

Brads and finishing nails, special sizes, 80

p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon,

per gross 3 38 4 00

Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½

Carbon safety " 0 18 0 00

Canada w. w. " 0 18 0 00

American w. w. " 0 00 0 21

Pratt's Astral. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can,

with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

" Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks—Curtis & Curtis

Mrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to

2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range ½

to 4. 100 00

No. 56 Hand Machine, range 2½

to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent.,

American dis. 55.

Wood, fancy Canadian or American, 37½

to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 27½ per cent.

Bailey's Victor, 25 per cent.

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½

40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors' " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 0 17½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis

60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

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Carriage, Section, Wagon Box Rivets, etc.,

(Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclu-

sive, 65 and 5 p.c.

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Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.

cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

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¾ in. 6½ 00 7½

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Cotton 15 17

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Boxwood, dis. 80 and 5 to 10 p.c.

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N.P., per set. 90

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Dome, Shepard's, per doz. 4 75 5 00

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S. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes,

per dozen. 0 40 0 70

"Empire," McMillan & Haynes,

per ft. 0 00 0 70

Hand, Diston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Diston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

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frame only. 0 00 0 75

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B. & W., N.P., dis. 65 p.c.

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Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 60 p.c.

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" japanned handles, 67½ p.c. off.

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Tin rim, per doz. 2 30 2 45

" black, " 1 8 2 25

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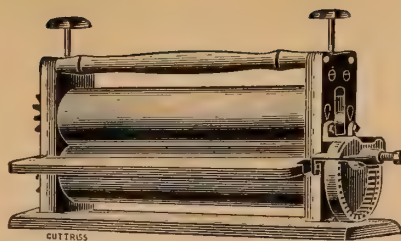
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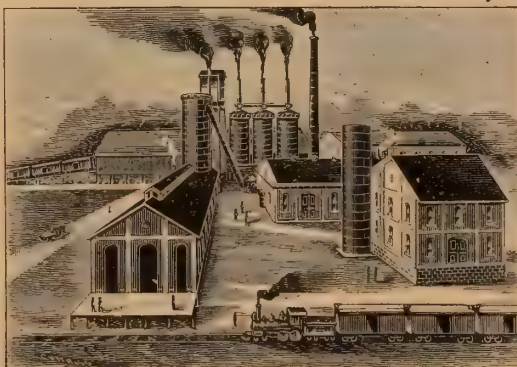
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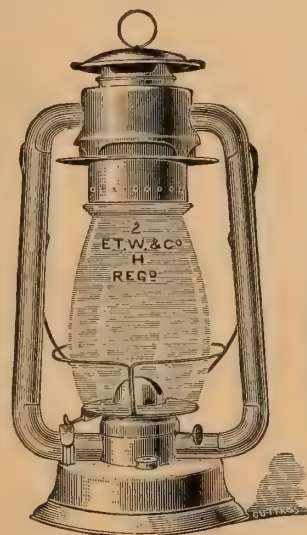
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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, SEPTEMBER 18, 1897

No. 38



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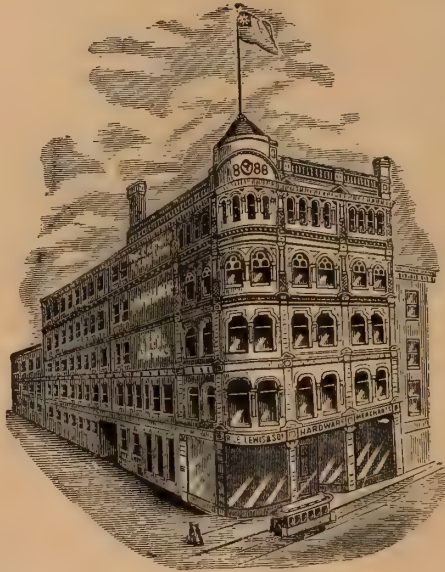
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ADVANCE IN LEAD PRODUCTS.

THE advance in pig lead is at last exciting a distinct influence on its products in the Canadian market. In fact, the reluctance that they have displayed in responding to the steady rise in the raw material, both in Great Britain and the United States, was surprising.

The advance in pig lead during the past three weeks has been marked, and has never been equalled, it is said, in the same space of time previously.

Pig lead now costs 70c. more per 100 lbs. laid down in Montreal than it did in the middle of August.

With this remarkable advance in mind and every prospect of a still further advance, a rise in all kinds of lead product is natural. Indeed, agents for leading English firms refused to book orders for pig lead at the advance this week.

There is little chance of any supplies from the States coming in for less money either. The United States has been supplying most of the pig lead to the rolling mills and paint grinders lately, but now their price is even higher than the English figure.

With this important advance, white lead,

which usually follows tardily, has been prominent in the rise abroad because of the abnormally low margin that has existed for some years between pig and white lead. Canadian makers of white lead appear content to run out their contracts, so that the advance made on the Canadian market is much less than the English equivalent.

Prices on white lead to-day are $\frac{1}{8}$ c. per pound higher than they were a week ago, but makers at this writing are considering the advisability of a further advance, and it may go into effect before the commencement of next week.

Naturally, other lead products have appreciated in value for the same reason as white lead. The trade discount on shot has been reduced to $12\frac{1}{2}$ per cent. This is an advance of 5 per cent. in two weeks.

Lead pipe has shared in the strength with the other lines, and jobbers this week are asking an advance of $2\frac{1}{2}$ per cent., the trade discount having been reduced to $27\frac{1}{2}$ per cent.

A man's career is often checkered because he doesn't act upon the square.

CANADIAN PAINTS FOR EXPORT.

It is surely a striking instance of turning the tables on our old-time foreign competitors to know that orders for over a hundred tons of colors and varnishes were booked last week by the Canada Paint Co. for export to American, English and Australian markets.

These goods are said to be taking root entirely on the ground of excellence in quality. The manner in which they are put up is in itself a revelation of neatness.

COOKING BY ELECTRICITY.

COOKING by means of electricity is one of the conveniences to which the good housewife may look forward as a reality of the present or the very near future. In a paper on "The Economy and Utility of Electrical Cooking Apparatus," read at the recent Eliot meeting of the American Institute of Electrical Engineers by Prof. J. P. Jackson, a result from tests with electrical cooking apparatus in practical family use was given. For a typical breakfast and dinner for a family of six people the cost of cooking was 13.55c. for breakfast and 29.8c. for dinner. Prof. Jackson thinks that electric cooking is just the thing for light housekeeping in large cities, and that it could also be used with facility in boarding houses and restaurants for purposes which require an even temperature.

The general results of the tests were of such a nature that Prof. Jackson is of the belief that if centralization managers would more generally introduce exhibition equipments of these domestic utensils a new call on their station capacity would develop.

An exhibition of this electrical cooking is to be made on a large scale at the formal opening of the Lachine Hydraulic Works, and visitors will have an opportunity of sampling the articles cooked. A number of electrical firms have promised to exhibit at this opening, among them being the Canadian General Electric Co.; Wagner Co., of St. Louis; Trudeau & Co., of Ottawa; John Foreman & Co., representing a Detroit company, and R. E. T. Pringle, of Montreal.

NO MORE HUMILIATION.

SIR LOUIS DAVIES, Minister of Marine and Fisheries, stated a few days ago during the course of a speech delivered in Charlottetown, P.E.I., that he "strongly hoped that in the not distant future negotiations would be renewed, probably within the next few months, which might result in much freer trade relations between Canada and the United States."

Canada has always courted closer trade relations with the United States. Our people possess business common sense: They know that the more customers they have the more goods they will sell. But Canadians are in no frame of mind to bow meekly to Uncle Sam for the desideratum. Time and again, to our humiliation, have we done so, only to receive rebuffs instead of reciprocity.

We are just as willing probably as we ever were to do business with the United States. But the desire for business does not demand our humiliation. Humiliation is not business.

Canada has importuned the United States already too many times. The duty of this country is to cease importuning. It is now the turn of the United States to take the initiative. One thing is certain, we shall be only weakening our case if we do so.

The affairs of the United States are controlled by a type of politicians who are actuated by party exigencies and not by business ethics. Such well-known and important publications as The New York Journal of Commerce recognize that the Dominion of Canada is a much more valuable market than that of all the Central and South American countries combined. But the politicians either will not or cannot recognize this. It pays them better to twist the British lion's tail and snub everything British. And as long as these conditions exist it is foolishness, aside altogether from its unmanliness, to ask for bread where we may expect nothing but a stone.

The United States does not supply us with the breath which is necessary to our national existence. The politicians over there think otherwise. And the best course for Canada to pursue is to allow them to learn by experience that greater illusion never had any man.

The people of the United States are keen for business. No people are more so.

By-and-bye, when they realize what certain well known trade journals already do, the barrier now existing will be removed and Canada and the United States will have closer trade relations. Until then we may as well expect the heavens to rain rum as the United States to accord freer trade to Canada. In the meantime, therefore, it is to be hoped no Government of this Dominion will again bring humiliation upon this country.

THE REDUCTION IN STAMPED WARE

WHEN HARDWARE AND METAL the other day noted the change in stamped ware its full import was not known.

Not only was the discount altered from 80 to 80 and 10 per cent., but it has since been learned the whole list was revised, with the result that in some lines a reduction of from 10 to 15 per cent. in price was made.

The reduction was due to the fact that some houses had been lately importing certain lines from the United States. And the necessity for revising the whole list arose from the desire of the manufacturers to maintain a uniform discount, which they could not have done and met the competition from across the border.

The new list is now in the hands of the trade.

Exaggerations may sell goods in the first instance, but they are just as certain to lose customers in the second.

THE FURNACE AND STOVE TRADE.

Good times are being confidently looked for by stove and furnace manufacturers this season. As far as furnaces are concerned, it is expected to be the best yet experienced.

The furnace trade is naturally a growing one on account of the tendency of the furnace to replace the stove, but this season this natural tendency is being accentuated by the demand which the higher prices for farm produce and the generally improved trade conditions have stimulated.

At the moment, manufacturers are about as busy as they can be making shipments, and not only of furnaces but of stoves as well.

THE STOCKS OF GLASS.

THERE seems to be a difference in opinion among the Toronto dealers in regard to the expediency of laying in large stocks of glass. The Belgium market remains quite firm, but yet some dealers think it is better to hold off purchasing, not so much on account of the likelihood of falling prices, but rather of falling tariffs.

At present the Belgium market is lower than the English, chiefly on account of lower-priced labor in the production. But when the Belgium glass will not enjoy the preferential rates it is considered doubtful whether it will be able to stand English competition. Some dealers have the mistaken idea that this applies January 1, 1898, whereas the rate does not go into force till August 1, 1898. It is considered probable that glass will advance, and these dealers who have short stocks yet seem to be making a mistake.

A SAD BEREAVEMENT.

For a second time within the past four weeks death has visited the home of Mr. Peleg Howland, of the wholesale hardware firm of H. S. Howland, Sons & Co. On each occasion a little child was taken. The second visitation was on Thursday last, leaving Mr. and Mrs. Howland childless. HARDWARE AND METAL extends its sympathy with the bereaved parents.

A BICYCLE FAD.

There seems to be a growing demand among a certain class of riders for racing handle-bars on their road wheels. Just why it is hard to say. It can't be that they prefer them for riding purposes, as the majority ride with their hands close up to the head and thus escape the humped position. There is nothing more uncomfortable, as well as unsightly, to see a man in this humped position.

NO CYCLE SHOWS NEXT YEAR.

No national or local cycle shows will be held in the United States during this or next year. Such has been definitely decided by the members of the National Cycle Board of Trade. February 22 next has been recommended by the board as a general opening day for the wholesale and retail trade throughout the country.

TO SOLDER ALUMINUM.

THE soldering of aluminum has so far proved a difficult and almost impossible task. For a long time those in the tinsmithing trade have been making vain attempts to overcome this difficulty, which, with other things, prevented its general use. Most solders, such as ordinary hard solder, composed of silver and tin, or ordinary soft solder, composed of lead and tin, will not stick, owing to the high heat conductivity of aluminum. The heat is very rapidly drawn from any of the molten solders, causing them to freeze before flowing sufficiently.

Mr. Alfred E. Hunt, of Philadelphia, in a recent address, threw out some valuable hints on the subject. Good joints can be made by carefully cleaning the surfaces to be joined, and with very hot soldering bits, or careful work with the blow pipe, tinning the surfaces with some of the special solder used before attempting to join the materials. Several such solders are successfully used, pure tin, with a little phosphor tin, being the basis of the majority of such solders.

Many fluxes have been proposed in the

soldering of aluminum. Common stearine is about as efficient as any. Soldering bits of nickel are best to be used, and good work has been done with those kept hot. Special care should be taken in this case in order that the surfaces to be soldered be kept clean, which can be accomplished by scraping or brushing.

Another way to clean the surface of aluminum, either for soldering or plating, is to dip the sheets into nitric acid, diluted with three times its bulk of hot water, and which has had added to it just enough hydrofluoric acid to make the solution act on the surface of the metal, this action being denoted by the evolution of gas bubbles. The solution can be kept in either a wooden or lead lined tank, and the amount of hydrofluoric acid need only be about 5 to 10 per cent. of the mixture. The latter substance costs about 5c. a pound. The aluminum, after being cleaned in this dilute nitric acid and hydrofluoric acid solution, is again dipped into hot water for rinsing and dried in hot sawdust; it is then cleaned so that either solder or plating solutions can readily be applied.

Aluminum can be protected in places where it is exposed to galvanic action by insulating with rubber, with canton flannels soaked in a mixture of white lead and oil, or with some other non-conductive substance.

PARIS GREEN TRADE.

The season for Paris green is over for 1897, and quotations have been withdrawn.

The season was not a satisfactory one, the early anticipations not having been realized. First of all, the potato bug was not so much in evidence as in former years. This naturally led to a curtailed sale. Then, what was the natural concomitant, prices became demoralized, through some of the houses cutting prices in their anxiety to induce business.

It is asserted, however, that the stocks held by the timid ones have been dissipated, and that the ground for next season's trade has been well cleared.

The C.W.A. membership on Sept. 1 was 9,387, the membership twelve months ago was 8,421, showing an increase of nearly 1,000. Secretary Donly thinks it should go to 12,000.



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**IVER JOHNSON'S ARMS AND
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Fitchburg, Mass., U.S.A.



TO WHOM SHALL WE EXTEND CREDIT? *

By B. G. McMECHEN.

THE average credit man needs no advice as to how this important question should be answered. He knows full well how to judge of a man's credit standing when the facts are clearly spread before him and fully realizes his plain duty and to what extent, if at all, he should extend credit.

The question asked is propounded to the National Association of Credit Men in convention here assembled, and it occurs to me that good results might be derived from an open and thorough discussion of this subject by the convention. Are the members of this association prepared to join in formulating and will they abide by methods which will properly protect the honest debtor, and likewise protect the creditor as against the schemes of the dishonest debtor? Will they be honest in the exchange of information concerning their customers, reporting actual facts where they are at liberty to do so?

What will the members of this association do towards establishing a higher standard of credit? Credit is too cheap. It has become a drug in the market, and credit men, or the firms and stock companies with which they are connected, are responsible for this condition. When the unscrupulous or the irresponsible merchant comes to you and wants to buy your goods on time, you have your goods in your warehouse and you are master of the situation. Fill his order, transfer the goods to him, and the situation is reversed; he has your goods in his store and nine cases out of ten he is master of the situation.

If, upon investigation, your conscience and your experience tell you that the man seeking credit is not entirely worthy of it, say No, and stand firmly by your decision.

The goods in your store make better assets than worthless accounts, and the former will, at least, net you a good percentage of the cost, while the latter will, in all probability, net you nothing; with, perhaps, an attorney's fee thrown in by way of premium.

Eagerness to sell goods and increase sales over those of previous years frequently gives the fraudulent debtor an opportunity to lay his plans for another dishonest failure and may lead the man with insufficient capital to overstock himself beyond his ability to pay, thereby compelling him to secure extensions from his creditors or to make an assignment.

Let each credit man stand firm in his own honest convictions of rights and duty

and dispense credit only where it is merited, compelling the irresponsible and the dishonest merchant to pay cash for his goods, or go without.

Educate your customers to understand that you are not speculating on their accounts, that you are selling them goods because you know you will get your pay. Keep their accounts well in hand and command their respect as well as their trade, by holding them to their promises, while you keep your promises to them.

When it is necessary to have a property statement there should be no trouble to procure one. The man who refuses to give a property statement, when asked for one, has his own good reasons for refusing, and in that case the wise credit man will keep his goods and let the other man keep his reasons.

Let the trade understand that your house is not run on philanthropic principles, and that the credit man is not the patron of a foundling hospital where infant industries are nursed.

Business men can be and should be public spirited, and may even be philanthropists, but you will always note that the successful business men do not dispense philanthropy from their credit departments.

The man who has sufficient capital in his business to enable him to conduct it properly, who is honest, and possesses the necessary ability for the successful management of his business, does not cause the credit man to worry.

The people who worry the credit man are the men who are trying to do a large credit business on too small a capital, the reckless buyer who does not keep a clean and well-trimmed stock, the man who is careless of his promise to pay, and allows his creditors' drafts to be returned, the man who is reckless as to whom he trusts and negligent in the matter of making collections, the man who is extravagant in his living and business methods, the all-round incompetent man and the man who is always asking for more time.

These are the kind of merchants with whom the credit man must labor and over whose accounts he must keep close vigil.

But so far as the habitual fraud is concerned, the man who is known to be dishonest and has, perhaps, one or more dishonest failures to his credit, the honest and sterling credit man will not consider him for a moment, except on a cash basis. Life is too short to justify our worrying over the trade of this class of people.

Of course, we are all liable to err in our judgment, and through misrepresentation the dishonest man sometimes creeps in on our books. As soon as we find that we

were deceived, and are obliged to take steps to save our account we should give our fellow members the benefit of our experience to the end that the fraud may not impose upon them, and that he may be held up to the world as an object totally unworthy of credit.

The ideal and most valuable credit man is the one who will authorize the least amount of credit where credit should not be given, and with the son of Erin I wish to say that the best way to save an undesirable account is not to create it. In many large concerns the credit and collection departments are handled under separate heads, but usually all are under the direction of the head of the credit department.

It is not my purpose here to touch upon collection methods or collection laws, although God knows they need to be touched upon.

But I do desire to impress upon your minds the great value you can be to yourself, your house, and to this association by declining to fill, in every instance, orders from merchants whom you know to be unworthy of credit; at the same time informing this association, through its secretary, of your actions and your reasons for the same.

This to my mind is the greatest good that we can accomplish for each other and for the association.

I do not mean that we should become a general reporting body, nor that we should compete with our commercial agencies in the matter of furnishing reports, but that we should co-operate in the matter of shutting out as credit customers all those who are known to be dishonest, or for other good reasons are known to be unworthy of credit.

A system for disseminating information of this character could be made very simple and would not require the outlay of much money by the association, or entail a lot of unnecessary machinery.

Weekly or semi-weekly bulletins could be issued by the secretary and mailed to local associations and individual members. Forms to be used for this purpose need not be elaborate, nor the reports long drawn out. All we would want would be the actual facts, and those members who were interested in any particular case should know how to appreciate the information, and the proper use to make of it.

Let there be no deception practised in furnishing this information, but let us be honest, and let us have the truth, the whole truth, and nothing but the truth, or else withhold the information altogether.

The time usually granted the retail dealer should be shortened; the practice of long dating is pernicious, and has, of itself, caused many good men to fail. The members of this association should use their in-

*Address delivered at the Kansas City Convention of National Association of Credit Men.

fluence with their respective houses to have this evil corrected.

If you are to be held morally responsible for the sales you approve, you should have something to do with the regulating the time on which goods are sold, and the matter of time granted should be carefully considered by you while passing upon the credits.

The average man in business would rather do right than wrong, and would not obligate himself beyond his ability to pay if allowed to use his own judgment, but he is sometimes misled by the eager salesman, who tells him that he will not be crowded for the pay, that he can have all the extra time he wants if he will just write to the firm and ask for it.

Under these and other verbal promises the retail dealer is frequently induced to buy twice as many goods as trade conditions would warrant, and when the bill is due the credit man has trouble on his hands for which he is not responsible, and the dealer gets his extension.

This is one of the little irregularities that the credit man can and should correct, and in so doing render a service to his house as well as to the dealer.

There are other matters that are considerably out of joint in the present system of jobbing goods, which materially interfere with the proper settlement of accounts, and unnecessarily complicate the work of the credit man and bring harm instead of good to the retailer. It may not come within the province of this association to take action on these matters, but the individual credit man has the right and should lose no opportunity to urge reform wherever needed, in matters affecting the handling of credits in his own department.

The past year has been a campaign of education for credit men; they seem to have awakened to a new life and new hope; all of us have profited more or less by the instructions we have had, and the examples that have been set for us.

Let us, therefore, continue in the good work; let us have confidence in each other, and in our association; let us give credit only to those who in our best judgment are worthy of credit; and let us build up a great bulwark of protection to the end that we may establish the highest possible standard of credit throughout the land, and prove by our great achievements that this association was born for a noble purpose.

ELECTRICAL FREAK.

Electricity played a strange freak some time ago in a private residence in Brooklyn. The trolley lines of the street railway passed near the residence and the electricians were repairing the feed wire, when it fell to the sidewalk and grounded on a water pipe at

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the edge of the gutter in front of the house on the opposite side. The heavy current passed along the water pipe into the house and to the second floor, where the current melted a large hole in each of the lead water and waste pipes. The water flowed out in a torrent and flooded the house, doing considerable damage to the building and its contents.

AN AMERICAN ON CANADIANS.

HUGH B. KEOUGH, in The Chicago Journal, says: "The Canadians seem to have it on us to a considerable extent this year. They have taken considerably more than the portion assigned them in advance figuring of the rowing events in the Northwestern and National regattas. Their man Loughhead has been the sensation of the year on the bicycle track, and now they have two horses on us in the race for the Seawanhaka-Corinthian Cup for one-raters, which they carried away last year. No attempt has been made to bring back the yachting championship which Canada won last year in successful competition with the Vencedor, built for that purpose in Chicago.

"Canada has reason to be proud of her prowess in every department of manly sport

this year, and her people are not in the least inclined to underestimate the importance of their victories or fail to make the most of them. All these things mean more to the Canadians than they do to us. Over there they are made matters of public concern, Over there every inhabitant of the colony is interested in them, while on this side but a trifling percentage of the population ever hears of them. Wherever the Canucks have a man rowing, a horse running, or a yacht sailing, they are there to bet on their representative, and anybody who gets mixed up in these international disputes cannot fail to notice that they will bet the eye teeth out of an equal number of Americans.

"When a Canadian returns home after winning an important event or a championship it is made the occasion of a public demonstration, in which everybody, from Governor down, takes a hand. The bells ring, the cannons belch, the factory whistles blow, and flags are hoisted over the public buildings. There are torchlight processions, bands of music playing 'Hail to the Chief' and 'Rule Britannia,' dining, speech making, and an immense consumption of 'London dry and soda.' There is absolutely nothing too good for the central figure in these demonstrations. He can have anything he wants, and he doesn't have to ask for it, either."

A HILL-CLIMBING BICYCLE.

AMONGST the various improvements in articles of luxury and usefulness nothing of late years has surpassed the ingenuity and enthusiasm which have spurred on invention in the improvement of the bicycle, from the days of the old velocipede, some thirty years ago, until the culmination in the finished wheel of to-day. The velocipede had a restricted usefulness that was entirely confined to the riding school. Men soon grew tired of the riding school, and required something requisite for road travel. A new machine was invented to meet this demand, and the world received the high wheel "Bone-shaker." But the latter had inherent defects, the chief of which was the absence of safety. A fall from a high wheel was a serious matter, and its use was debarred to the gentler sex. This disability set the inventors again to work, the result of which was the advent of the "Safety," with pneumatic tires. The latter sprang almost immediately into world-wide favor, a marked evidence of which was its ready adoption by the ladies. It was speedy, elegant in construction, and the element of danger had been reduced to a practical minimum. It seemed as if perfection had been reached, but another element was still left unsecured. The human frame is only capable of a certain amount of exertion, and any invention that could lessen the labor of propulsion is eminently desirable. This has been remedied at last, and it is gratifying to know that it is by the perseverance and genius of De Witt W. Spence, a citizen of Guelph, that this new invention has been perfected.

The object of this invention is an arrangement by which the rider can, without stopping his machine, reduce the speed and

increase the power so as to facilitate climbing hills and, with equal facility, can restore the machine to its original speed. It consists of two rocking levers fulcrumed in the crank bracket of the machine, the front arms of which carry pedals which do not revolve, but simply move up and down with the natural motion of the feet. The rear arms of the rocking levers project downwards at about right angles and carry on them sliding shoes, which are connected by rods to the crank arms of the front sprocket wheel of the machine, which, in this case, are carried back as close to the rear sprocket as possible. The sliding shoes are raised or lowered on the rear arms of the rocking levers by means of links which are operated by a small hand lever on the front of the frame of the machine.

It will easily be understood that when the links are let down, the sliding shoes are nearly at equal distances from the fulcrum, and, the leverage being very slight, short quick strokes of the pedal are sufficient to propel the machine at a high rate of speed, whilst, on the other hand, if the links are raised, the sliding shoes are drawn up near the fulcrum, the leverage is very great and any required power may be developed.

The advantages of this invention are incalculable, and it bids fair to revolutionize the manufacture of bicycles.

Riders will accept with alacrity an invention that will render hill-climbing an easy matter, and which will entirely neutralize the adverse influence of a head-wind. To the ladies, it appeals in an especial degree, when it is remembered that it only requires one half the effort required to propel an ordinary bicycle. It permits of any shaped saddle that may be prepared, and, in future, we shall see saddles that are models of ease and elegance, which a lady may sit all day

without feeling the slightest discomfort. In going down hill all danger of the bicycle getting beyond control of the rider is entirely removed, as it will be simply impossible to escape personal control. In addition to all this, two special advantages are claimed by the inventor for getting up speed, first, the stroke, or foot-travel, is so short, and secondly, having such an amount of power gives the advantage gained by the use of a large sprocket.

Mr. G. A. Richardson, Wyndham street, will push the business interests of this new discovery.

ECONOMICAL BOILER FEEDING.

A new method of feeding boilers has been introduced by the Q. & C. Co., of Chicago, Ill. The apparatus is claimed to use less steam than by the ordinary method using pumps. Its principle of operation is the filling of an elevated closed chamber with water and its subsequent discharge into the boiler by gravity through the admission of steam pressure upon its surface from the boiler. The steam is then condensed by the next following charge of water, so that the heat contained in it is usefully employed in raising the temperature of the feed water. The apparatus is a highly ingenious application of several forces, since pressure, temperature, radiation, condensation and gravity, all contribute in its operation. It is called the Scott Boiler Feeder.

VARNISH GUMS.

The Canada Paint Co. had a most unique collection of gums, from which varnish is made, at the Toronto Exhibition. One immense piece of Kauri gum from New Zealand was the largest and purest ever brought to America. The exhibit was extremely interesting and commanded a great deal of attention from expert varnish makers, finishers, and the public generally.



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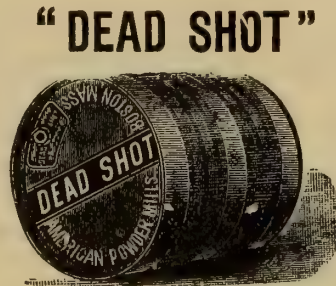
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MEN WHO HAVE BRAVED GREAT HEAT.

TINPLATE workers have to bear great heat, but few can realise the heat which the human body can bear without hurt, says a Swansea, Wales, paper.

At the beginning of the century several interesting, though highly dangerous, experiments were made by different men, chiefly foreigners, with reference to this subject. The first man who risked his life in this manner was a Spaniard, of Andalusia, named Martenez, aged 43, who gave an exhibition of the most extraordinary feats on July 26, 1828, at the New Tivoli, Paris. His performance took place in the presence of about 200 persons, amongst whom were many professors, savants and physiologists, specially invited by the physician, Robertson, the director of the establishment.

A cylindrical oven, constructed in the shape of a dome, had been heated for four hours by a very powerful fire. At ten minutes past eight the Spaniard, dressed in loose pantaloons of red flannel, a long Spanish cloak, and a felt sombrero, went into the oven. He remained in it, seated on a footstool, for fourteen minutes, with the metallic thermometer registering between 45 and 50 degrees, 50 being the highest

graduation on it. He sang a Spanish song whilst a fowl was roasted by his side. When he came out a committee of physicians found his pulse beating 134 pulsations a minute, although it had been only 72 on his going in.

The oven was then heated again for a second experiment. At a quarter to nine Martenez, returning to his warm apartment, ate the fowl and drank a bottle of claret to the health of the spectators. His meal concluded, he came out, and it was found that his pulse had risen to 176, indicating a heat of 280 deg. Fahr. Finally, he made a third and last experiment, almost immediately after the second. He lay down on a plank in the oven, surrounded by candles, and the door of the room was closed. In a minute or two a stream of melted tallow began to flow under the door, and at the end of five minutes, the audience, raising a cry of "Enough! Enough!" the door was opened. A nauseous and suffocating vapor of tallow filled the inside of the oven. On examination the human salamander's pulse was found to be now 200 to the minute. Emerging from his fiery furnace, he plunged straight into a cold bath, and three minutes afterwards was going about as lively as before the experiments commenced.

About the year 1809 there flourished a famous impostor, by name Lionetto. He

also was a Spaniard, and his trickery was exposed by Professor Sementini, whose enquiries into the tricks led to several important discoveries in medical science. Lionetto astonished England, Italy, France and Germany by his apparent insensibility to heat. He handled with impunity red-hot iron and molten lead, applied them to his hair and feet, held them in his mouth and drank boiling oil.

Anxious to discover the means by which Lionetto rendered himself invulnerable, Sementini performed several experiments upon himself. He observed that when the hot substances touched any portion of Lionetto dense white fumes arose, and that the boiling oil hissed on his tongue just as water does when dropped on heated metal. As a result of his experiments he found that when the human skin is rubbed with either sulphuric acid in a diluted form, or, better still, with a concentrated solution of alum, it loses to a great extent its sensibility to heat, and this insensibility is further increased by subsequent washing with hard soap. When the alum solution was used the dense white fumes which he had noticed in the case of Lionetto were caused on the application of red-hot iron, etc. There is little doubt that this was the secret by means of which the Spaniard was able to perform his seemingly miraculous feats.



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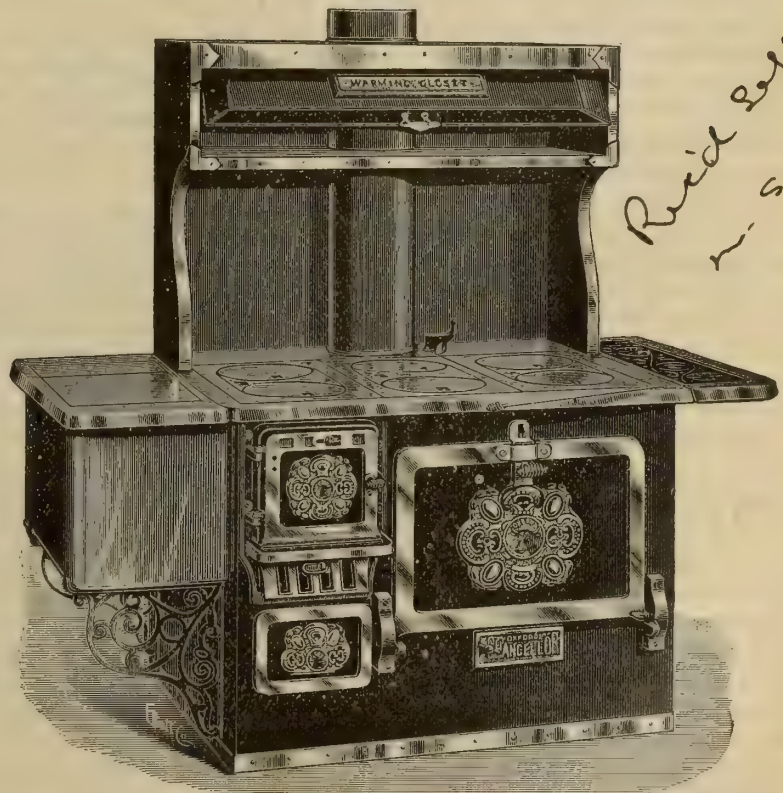
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MENACES TO PROSPERITY.

WHOEVER has followed with attention the development of business for the last ten or fifteen years must undoubtedly have come to the conclusion that the small retail tradesmen are gradually being driven out of business, as they work with modest means and cannot stand in the long run the competition of the large houses and department stores that work with an enormous capital. The small merchants and tradesmen are gradually disappearing in such a manner that in the long run there will be in existence in the middle-sized and large cities only large warehouses, department stores and employes. It is impossible today for a clerk or a saleswoman who has been employed for ten or fifteen years in a business house to start in business with modest means and to establish an independence. The small stock of goods which they could acquire with their small capital is put in the shade by the large and powerful warehouses and department stores and the small enterprise is untenable from the beginning. In most of these enormous business houses the female employes are paid so poorly that it is impossible for them to save money anyhow for the establishment of a small business, since they are required in spite of the minimum salary which they receive to be well dressed when they appear in business. It cannot be denied that through the centralization of the large capital dissatisfaction is growing, and that unless a remedy is found an enormous proletariat will grow up. New companies are forming daily with millions of capital, buying blocks of property, establishing still larger warehouses than are in existence already, suppressing those which were formerly large and powerful, and hiring employes by the thousand. Every failure that occurs is the forerunner of a larger one, since the goods bought under value by the department stores are used to depress the market value of regular goods and to ruin small manufacturers who are trying to compete with larger ones.

Another great menace to the commercial future for all businesses is the establishment of branch houses by factories and large establishments on an enormous scale, and sales to private individuals are made from these branch houses, over the heads of small merchants. These branch establishments do as much harm in their way as the department stores. The small mechanics who in addition to their trade keep a little store are not any better off. They cannot stand the competition of factories for any length of time; they must give up their store and are forced to give up their business.

A third and likewise great menace to

trade and business in general is the pedlar, who, while not maintaining a regular store or business, is under no expense except personal, and in his turn undersells the small tradesmen. He pays no tax to the state, similar to many big corporations, who, while their officers draw big salaries, are willing to swear every year that they have more liabilities than assets and that they have no income on which to pay a tax.

It may be asked why we bring up this subject and why we go into it at such detail. It is because we contend that unless a remedy is found against this weeding-out process of the small merchants, the small tradesman and the small manufacturing mechanic, the purchasing power of the general public is reduced constantly and that in the end agricultural products, which at present fortunately command a fair price, must fall in price, since those who desire to buy them will have no money wherewith to get the same. When the prices of beef, of lard, of pork and tallow were falling in spite of the fact that our population is increasing at a greater ratio than the animals from which these products are made, we heard frequently the cry: "How is it possible? People must eat in order to live and they must use soap and clothing (wool); consequently if the consumption holds up how can prices fall?" The fact of the matter is that during the last 7 or 8 years of hard times many a home has been without meat a good part of the time, and many a piece of bread was eaten without being buttered or larded. We do not want to make propaganda for socialistic theories, but the consolidation and contraction which is going on is continuous. On looking over the record of our own trade as well as those of other trades we find that the number of failures together with the number of those that voluntarily retire from business regularly exceeds by far the number of new establishments which are being founded or started. It only leads to one conclusion—business is consolidating in the hands of a few in all branches, and the whole population of the United States is working to enrich these few, who are nursing Bryanism and dissatisfaction. We did not want to make these remarks when everybody was downhearted, when prices were low and business was poor, but we think they are very timely now, when there is a flurry of prosperity. This prosperity can be made to stay, but the conditions causing prosperity must be changed. The country cannot be prosperous unless her people are happy and contented. People can only be happy if they earn a little more than they need, so as to save a penny for future needs. Dollar wheat alone does not make prosperity. A man must have the dollar to buy it. If not,

dollar wheat is no better to him than 50-cent wheat was at the time when he did not have 50 cents to buy it with.—National Provisioner.

WASTE PRODUCTS IN IRON MANUFACTURE.

AMERICANS are accustomed to claim for their iron and steel plants superiority over those of European countries in many points. In their blast-furnaces they claim to have increased the capacity to a point far beyond anything known abroad, and they have been able to make iron at a low labor cost, in spite of higher average rates of wages. This has been secured largely by the use of machinery wherever possible, and by cutting down the amount of labor required to the lowest possible point. To a certain extent also economy has been secured in fuel and materials; and all this without in the least reducing the standard of quality in the product. In some respects, however, they have, considers The Engineering and Mining Journal, much to learn yet from their competitors. It is, perhaps, a consequence of having abundant supplies of raw materials that they have been careless about their use, and indeed rather inclined to wastefulness. This is especially apparent in the iron manufacture, where they have, as a rule, entirely neglected the by-products which, in other countries, form so important an element that the possibility has been suggested that before long the pig iron made will become a by-product, and the blast furnace will be valued chiefly for its output of chemicals. They are considerably behind the English and very far behind the Germans in this respect, and there is corresponding room for improvement. The most important element of saving in European practice is found in the use of the by-product coke oven, which is almost universal in Germany, and is gradually making its way in England. In Scotland, where the majority of the furnaces use raw coal, and not coke, for fuel, plants are found at a number of the iron works where the gases escaping from the furnaces are

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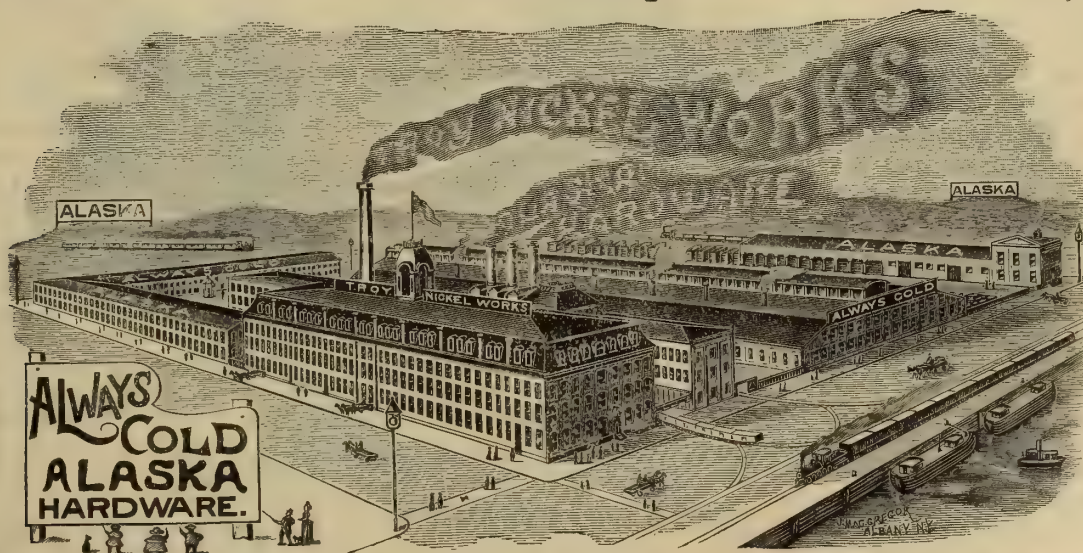
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TROY NICKEL WORKS, Albany, N.Y.

treated for the purpose of saving the ammonia sulphate, tar and other chemical products, while the purified gas is used for fuel in boilers. These plants, of course, serve the same purpose as the by-product oven, and are, perhaps, not specially to be recommended except under the peculiar conditions presented in Scotland. In Germany the slag from the furnaces is used for making bricks, for roads and similar purposes, and new applications for this material are constantly being found. In America such uses are still comparatively rare. One of the latest applications of a by-product is found at the Cockerill Works at Seraing, in Belgium, where the waste gas from a blast furnace has been for a year past used experimentally to run a gas engine. This has proved so successful—though coke is used for fuel in the furnace—that the company is now putting up two more gas engines of 150 horse power each, and anticipates in time supplying a large part of its motive power from this source. Blast-furnace gas has also been recently utilized in the same way in Great Britain by Mr. James Riley, the well-known metallurgist.

CANADA'S COAL RESOURCES.

IN an interview with a press representative at Newcastle-on-Tyne, Mr. Ochiltree Macdonald, who has spent many years in Canada, gave some interesting information in reference to the coal resources of the Dominion. He said: "In the New England States we have a growing market. In these states they now consume between 5,000,000 and 6,000,000 tons of coal per annum, nearly all from Nova Scotia. Petition after petition has gone up to Congress from these states, praying for the admission of our coals free of Customs duty, but without avail, for, as The New York Sun, the most anti-British journal in the States, has pointed out by elaborate figures, the Nova Scotian collieries can undersell the American collieries in New England by 1s. 5d. a ton after paying a duty of 3s. a ton."

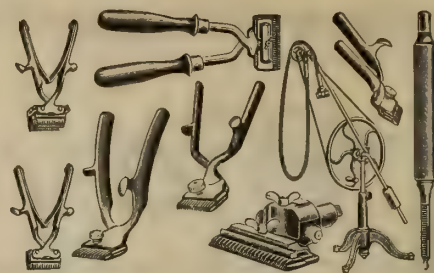
"You said you hoped to compete with English coal in the Mediterranean market before long; do you think that possible?"

"Oh, yes; our coal was sold on the Thames as far back as 20 years ago, at a profit of 2s. per ton. That we do hope to send it to the Mediterranean before long is a fact, though I am not at liberty to go into details on that question. Our papers are discussing it from day to day, and there is now on foot a proposal to establish a coaling station in the Azores, where Nova Scotia coal shall be regularly supplied. Our coal, I ought to tell you, lies on the edge of the great tidal harbors of the province. Our pits are shallow, the roof is generally good,

and the strata dry, and the veins non-gaseous. Our costs of production are consequently lighter than yours, and the coal can be raised and shipped from Sydney at very much less expense than the average North Country steam or gas coal. Moreover, the cost of carriage across the shortest route on the Atlantic is comparatively light, and we reckon that we are almost as near the Mediterranean market as you are on the Tyne, the time occupied in the voyage being about the same. There is no doubt about it that we shall some day be sending our coals to the Mediterranean market; it is only a question of time and development, and if your coal owners and ship owners are wise in their day and generation they will turn their eyes to Nova Scotia as a field for their enterprise, so that what they may lose at home they may gain abroad. As a bunkering centre Northeast Nova Scotia, with Sydney as its chief port, has very important advantages, and steamers in the American trade will find it quicker and cheaper to coal at Sydney en route to England than to go out of their way to Newport News and other American ports, as at present. In this connection I must repeat that we lie on the arc of shortest distance between America and North Europe, and a ship coming to Sydney for coals is not going out of her way, but taking the shortest route home. In Nova Scotia there are enormous coalfields as yet comparatively undeveloped. They cover a vast extent of Nova Scotia. The seams range from 40ft. down to 3ft. thick, and lie at no great depth from the surface, and the coal itself is of good quality, admirably adapted to steam purposes. And not only is the coal there in illimitable quantity, but the geographical position of Nova Scotia, combined with its fine natural harbors, makes the province an ideal centre on the American continent for shipping coal in every direction."

Walkerton has captured one of Toronto's important industries, the business of the American Rattan Co. having been purchased by the Walkerton parties, who will remove it to that town. The price paid for controlling stock is \$75,000, and about 100 hands are employed, many of them specialists, who will remove with the plant to Walkerton. The company was established in Toronto ten years ago with ten years' exemption. It is understood Walkerton will also grant certain valuable privileges.

Mayor Colquhoun, of Hamilton, received a communication the other day from the Mayor of Leamington, asking for the co-operation of the corporation of Hamilton in an effort to secure the imposition of an export duty on natural gas.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.
Norwich, Conn., U. S. A.

Brushes

Catalogue

for

1897

Now Ready

MEAKINS & CO. 313 St. Paul Street . . . **MONTREAL**
and Meakins & Sons, Hamilton.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,
Hamilton and Toronto.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS
PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate.
MARION & MARION, EXPERTS,
Temple Building, 185 St. James Street, Montreal.
The only firm of Graduate Engineers in the Dominion transacting patent business exclusively.
Mention this paper.

**ANTIMONY, Cookson's Star
COPPER, Sheets and Ingot
LEAD, Imported and Domestic
SOLDER, Half and Half
TIN, Straits and L. & F.
SPELTER, Imported and Domestic**

PRICES ON APPLICATION.

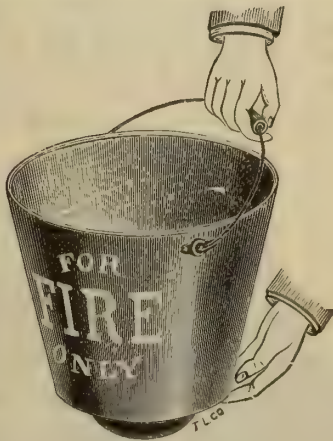
M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.



**THESE
THREE
WORDS**



in letters
of fiery
red

will make the careless employe pause when about to use Indurated Fibreware Fire Pails for chores. Besides, he couldn't if he would—the round bottom prevents their being used but “for fire only.”

The E. B. EDDY CO., Limited

HULL, MONTREAL, TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Sept. 17, 1897.

HARDWARE.

THERE has been a good volume of business transacted this week on the whole, and the general buoyancy of values tends to make buyers readier operators. Almost everything is on the up grade and is likely to continue so from present appearances for some time to come. Barbed and plain wire have exhibited a fair degree of activity in a small way, while wire nails are fairly active and some good orders for cut nails were reported. Horse nails and horseshoes attracted increased attention, while screws, bolts, and rivets have contributed a brisk jobbing movement. The same can be said of cordage, while files, carpenters' tools and cutlery have been genuinely active. Sporting goods are moving in large volume and the sharp advance of 5 per cent. in shot has tended rather to increase than check the demand.

BARBED WIRE—There is a fair enquiry for barbed wire in small lots. We quote the basis as before, \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—Demand for plain wire has been pretty active for small lots, especially in hay-baling wire. Discounts here range from 30 and 5 per cent. up.

WIRE NAILS—There has been a fair enquiry for wire nails, and, although there is

a steadier feeling, prices here are still more or less unsettled. Nominally, \$2 is the asking basis, but sales are being freely made to dealers at \$1.85 to \$1.90.

CUT NAILS—There has been quite a good demand for cut nails during the week, and prices are held at \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—An active trade is doing at the old discount, 50 per cent.

HORSESHOES—There is a good demand for horseshoes, especially steel goods. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is a steady trade in screws. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Dull, but unchanged, at 12½ per cent.

BOLTS—A good business is doing in bolts. Discounts are as follows: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach, 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough

bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—There is a brisk demand for rivets of all descriptions. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There has been a good jobbing enquiry for cordage. We quote as follows: Sisal, 7-16 and upwards, 5½c.; ¾, 6½c.; 5-16 and ¼, 6½c., and 3-16, 7½c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS AND CLOTHES WRINGERS—A moderate demand for the former, but the latter dull.

HARVEST TOOLS—A few odds and ends are still being asked for, but trade is practically over.

SPADES AND SHOVELS—Trade quiet and discounts unchanged.

FILES—There is a fair enquiry for these. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CARPENTERS' TOOLS—Continue precisely as last reported.

BUILDING PAPER—There is a fair enquiry for building paper. We quote 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

MARS

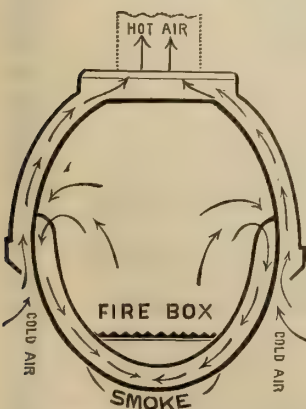
DOUBLE HEATER

A New Stove

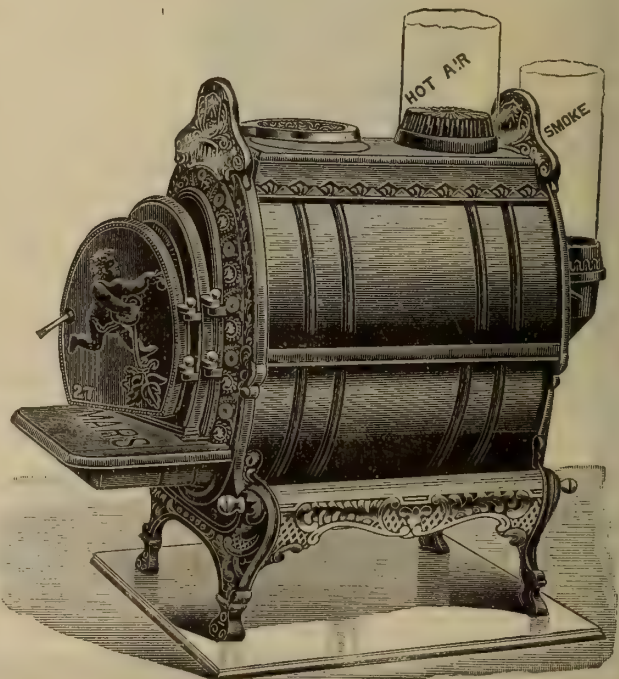
TAKES 27-INCH WOOD

- Heavy sectional linings that can be easily replaced.
- Flues same as in a base burner.
- Legs and base packed inside for shipping.
- Has one 8-inch pot hole over fire-box.
- Russian iron body with nicked trimmings.

WRITE FOR PRICES



Cut shows smoke passage and circulation of hot air.



THE McCLARY MFG. CO.

London, Toronto, Montreal, Winnipeg, Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL



"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

DO YOU?
WISH THUS TO BUILD
an
advertisement
in the
CONTRACT-
RECORD.
TORONTO
will bring you
tenders from the
best contractors



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

**The Wightman
Sporting Goods Co.**

403 St. Paul St.

MONTREAL

LEATHER BELTING—Business in this line continues quiet.

WARE—Enquiry both for tinware and granite iron work has been quite satisfactory.

HINGES—There is less doing in hinges than last week. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—Demand for cutlery, both table and pocket, has been quite active.

SLEIGH BELLS—Orders for these continue in steady volume.

SPORTING GOODS—Guns and ammunition of all sorts continue in very active request.

SHOT—The advance in lead has sent the price of shot up at last, and values are 5 per cent higher than they were. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent. trade discount.

CEMENT—A more active business is noted in cement, chiefly in Belgium, while prices hold steady. We quote: Belgian, \$1.85 to \$1.95.

FIREBRICKS—There is a good demand for these at \$16 to \$21 per 1,000, as to brand.

METALS.

The firm tone noted in our issue of last week is still maintained. All metals are firmly held, and the tendency seems to be towards higher values. The consumptive demand continues to increase, and especially is this noticeable in the United States. The situation here is considered as extremely hopeful. The railroads reflect a very favorable condition of affairs, inasmuch as they have more freight offering than they have cars to take care of. The good harvest throughout Ontario is expected to help business in that province very much.

PIG IRON—There have been some fair transactions in pig iron. Prices are firmer. We quote: No 1 Hamilton, \$16; No. 2, \$15; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayr-some, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—A fair enquiry is noted for bar iron, prices remaining at \$1.35 to \$1.40.

BAND IRON—There is no change in this line, business ruling fair on the basis of \$1 65.

HOOP IRON—Stocks light and prices steady at \$2.25.

SHEET STEEL—Firmly held at a base of \$2.35, with demand good.

SHEET IRON—There has been a good enquiry for all kinds of sheet iron, and the base price is firm at \$2.25.

GALVANIZED IRON—The good demand previously noted still continues, and we quote prices unchanged at \$4.15 to \$5.25 as to grade.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

—MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASCOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNally & Co. - MONTREAL

TINNED IRON—Fair enquiry and steady; 6 x 30 "Bradley's" No. 24 basis, 5½c.; other sizes and gauges the usual extras.

LEAD PIPE—There has been a further advance. We now quote lead pipe 7c. per pound and composition and waste 7½c., subject to a discount of 27½ per cent.

PIG LEAD—The continued firmness abroad exerts its influence and we know where bids of \$3.80 were refused this week, and we quote \$3.85 to \$4. The market continues absolutely bare of stock.

INGOT TIN—Steady and unchanged at 16 to 16½c.

INGOT COPPER—Firm, with an upward tendency, at 12 to 12½c.

SHEET COPPER—Unchanged with demand good. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—The firm feeling in iron pipe is fully maintained and jobbers this week are asking an advance on galvanized. We quote as follows: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.90; ½-inch, \$2.35; ¾-inch, \$2.84; 1-inch, \$3.91; 1¼-inch, \$5.25; 1½-inch, \$6.66; 2-inch, \$8.97. Galvanized pipe, ¼-inch and ¾-inch, \$3.10; ½-inch, \$4.15; ¾-inch, \$5; 1-inch, \$7; 1¼-inch, \$9.70; 1½-inch, \$13; 2-inch, \$17.25.

CANADA PLATES—Receipts of these have been more ample lately and prices are rather easier as a result at \$2.10 to \$2.25.

TIN PLATES—There has been a good demand for tin plate. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.50.

TERNE PLATES—There is little change in ternes, but some sellers accepted \$6 this week, and we quote that as the basis.

BOILER PLATE—Unchanged at \$1.90 to \$2.

SOLDER—Steady at 12c.

SPELTER—Quiet and steady at \$4.75.

ANTIMONY—Only a small trade doing at 9½ to 10c.

SHEET ZINC—Fairly active at 5¼ to 5½c., with casks 5c.

SCRAP IRON—No. 1 wrought sold this week at \$12 to \$12.50.

PAINTS, OILS, ETC.

The forecast of last week is being realized in a more active movement in this department. The week has seen an important advance in all lead products. White lead, which usually is slow, has been marked up ⅓c. per lb. over last week and the feeling is firm. The volume of business in mixed and other paints is coming up to the usual fall demand. Some good export orders for colors and varnishes have been booked also for the English and American markets. Linseed oil continues without change, our market having wholly ignored the excitement which existed to the south of us and which is now subsiding. Turpentine has been marked up 1c. in response to southern quotations.

WHITE LEAD—Very firm. We quote: Government standard, \$5.37½; No. 1, \$5; No. 2, \$4.62½; dry white, \$4.75.

RED LEAD—In good request at ¼c. advance, viz.: Genuine in casks, 4½c.; kegs, 4¾c.; No. 1 in casks, 4¼c., in kegs, 4½c.

LIQUID PAINTS—All kinds in fair request.

PUTTY—Is now entering on the busy season. We quote: Bulk, \$1.60 per 100 lbs.; bladder in barrels, \$1.75; tinned in cases, \$2.

LINSEED OIL—Unchanged. We quote: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Advanced 1c., and we quote: Single barrels, 45c.; 5-barrel lots, 44c.

VARNISHES—Demand good.

OILS—Gaspe cod oil is weaker and 1 to 2c. lower, at 28 to 29c. Newfoundland is firm at 33 to 35c. No more steam refined seal is offering in Newfoundland for sale, stocks having been exhausted. Prices rule firm. Norwegian cod liver oil has advanced 5 to 10c. per gallon, recent sales having been made at 60 to 65c. Castor oil is strong and higher, at 10 to 10½c.

GLASS.

There has been a good enquiry for glass, and the market is very firm in its tendency. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

The ashes market is very steady. We quote: First pots, \$3 to \$3.10; seconds, \$2.80 to \$2.85, and pearls, \$4.40.

CHEMICALS, ETC.

There is a good brisk trade doing in heavy chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

The price of lambskins is maintained at 50c. each, while beef hides rule steady at 8, 7 and 6c. respectively for Nos. 1, 2 and 3.

PETROLEUM.

Canadian petroleum in car lots sold at 13½c., and for less quantity, 14½c. is asked.

COAL.

There has been no change in coal. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

White lead has been marked up ⅓c. per lb. on all grades.

Gaspe cod oil has been marked down 1 to 2c., but other oils are all firm.

Arrivals of cement comprised 2,050 bbls. English and 2,324 bbls. Belgian.

There has been another sharp advance in the price of galvanized iron pipe.

Lead pipe has been marked up 2½ per cent., and shot 2½ and 5 per cent. on previous prices, and they point still higher.

HORSE NAILS, "M" BRAND, 1897

WE MAKE



All packages bear our

Oval Head in Nos. 4 to 12
"New Countersunk" Head in Nos. 5 to 12
New City Head in Nos. 2 to 8

MADE SOLELY
BY US.

Trade



Mark

We guarantee our Nails to be standard, hot forged and cold finished. If found defective we will replace them free of charge and pay freight both ways.

MONTREAL ROLLING MILLS CO. - MONTREAL

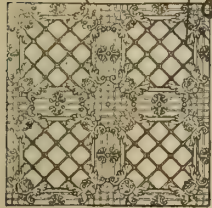
The "Hayes" Patent Metal Lath

Just the thing for
Pipe Chases

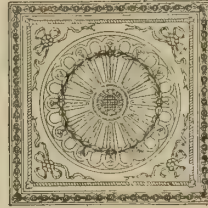


Just the thing for
Pipe Chases

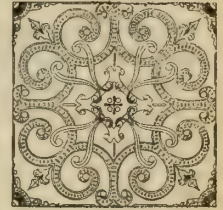
Used in many of the most important buildings in the Dominion and United States.



**EMBOSSSED
METALLIC
CEILING**



We illustrate herewith three of our designs. You should handle these goods. They are rapidly superseding Lath and Plaster.



The METALLIC ROOFING CO. Limited

WRITE FOR QUOTATIONS.

MANUFACTURERS.

1170 King St. West ... Toronto.

ONTARIO MARKETS.

TORONTO, Sept. 17, 1897.

HARDWARE.

WHOLESALE houses report that business during the Industrial Exhibition was not as heavy as it was last year. There were probably as many customers in as before, but their purchases were light. This week, however, since the travelers resumed their various routes, good orders have been received covering nice assortments. The demand is good for such fall specialties as elbows, stove boards, coal hods, stove pipes, cow ties, rope halters, axes, axe-handles, cross-cut saws, lanterns, etc. In wire, about the only feature to note is an improved demand for hay-baling wire. Horseshoes and horse nails are meeting with increased demand. The same may be said in regard to clothes wringers. Sisal rope is a little dearer. Payments are on the whole fair.

BARB WIRE—There is very little doing. Orders are small but stocks are light in Toronto. We quote: \$2.25 f.o.b. Toronto, Hamilton, Montreal and London. Terms, 60 days, or 2 per cent. off 30 days.

ORDINARY FENCE WIRE—Is quiet. Hay-baling wire, however, is going out more freely. Discount is quoted at 30 to 35 per cent. for annealed, oiled and annealed,

and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—There is not much doing, and the demand is principally for coppered iron and coppered spring. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—Trade is probably a little better, but enquiries for prices are more numerous than orders. The ruling price for Toronto, Hamilton and London is now \$1.90 per keg.

CUT NAILS—Business is still quiet. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—These are moving out more freely than they were. Discount, unchanged at 50 per cent.

HORSESHOES—Orders are coming in freely. The iron shoes are most wanted. We quote: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—The usual business is being done. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is still quiet. Discounts are 12½ per cent.

BOLTS—An active trade is being done in these. Discounts are: Common bolts, 3-16, ¼, ¾ and 5-16, 70 per cent.; ditto, ¾, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, ¾ and larger, 4c. per lb.; 5-16, 5c. per lb., ¼, 6c. per lb.

RIVETS AND BURRS—Trade is active and is about equally divided between pure copper and tinned or coppered. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Trade is fair. Discounts are 17½ per cent.

ROPE—The price of sisal rope has been advanced ¾c. per lb., the base figure now being 6c. Manilla is unchanged. The

demand is light. We quote as follows: Sisal, 7-16 in. and larger, 6c.; $\frac{3}{8}$ in., 6 $\frac{1}{2}$ c.; $\frac{1}{4}$ and 5-16 in., 7c.; 3-16 in., 7 $\frac{1}{2}$ c. Manilla, 7-16 in. and larger, 7 $\frac{1}{8}$ c.; $\frac{3}{8}$ in., 7 $\frac{3}{8}$ c.; $\frac{1}{4}$ and 5-16 in., 8 $\frac{1}{8}$ c.; 3-16 in., 8 $\frac{1}{2}$ c.; deep sea line, 13 $\frac{1}{2}$ c. for water laid, and 14 $\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—Quiet and unchanged. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—These are moving a little more freely, although no large sales have been reported. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS—There is very little doing except in corn knives, corn hooks, grass hooks and vegetable scoops. Discount on harvest tools, 60 and 10 per cent.

SPADES AND SHOVELS—Business has been a little better. Discount, 45 and 2 $\frac{1}{2}$ per cent.

BUILDING PAPER—Trade is only steady. We quote: Plain building, 30c. per roll; tarred lining, 40c.; tarred roofing felt, \$1.38 to \$1.45 per 100 lbs.

LEATHER BELTING—Trade is fair. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—Granite ware is in brisk demand, and a fair business is being done in tinware. The discount on stamped ware is 80 and 10 per cent. revised list.

HINGES—Trade remains fair. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CUTLERY—There is an active demand for cutlery, pocket knives and razors. Stocks throughout the country are light, and the prospects are good for the fall cutlery trade.

SPORTING GOODS—Business is brisk, and in certain lines of firearms some houses have exhausted their stock.

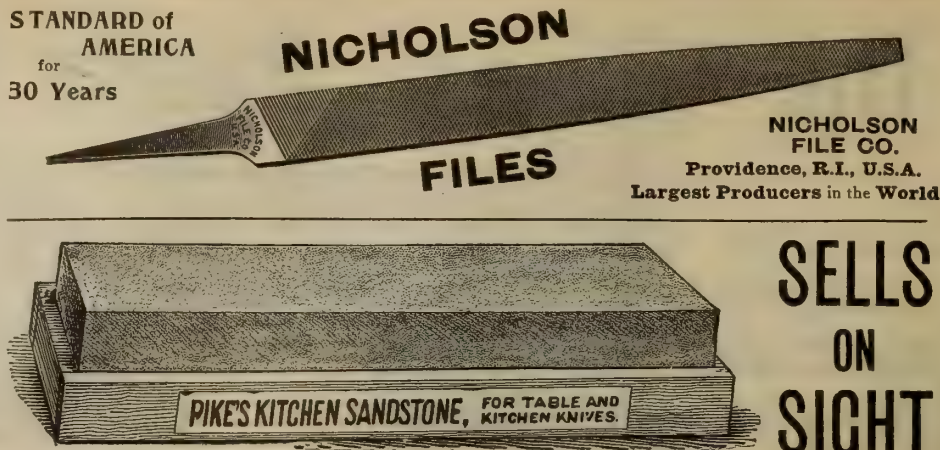
CEMENT—The demand has been slightly heavier during the past week; evidently there was a reaction in trade after the dull business of Exhibition week. The local demand is particularly brisk and dealers look for a continuance of the same. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The metal market is brisk, with values generally firm.

PIG IRON—The market is quiet and prices are steady. We quote as follows: Hamilton No. 1, in 100 ton lots, \$15.50 per ton; No. 2, \$15; Southern soft, \$16.50

STANDARD of
AMERICA
for
30 Years



NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

For Sale by Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

for No. 1, and \$16.15 for No. 2; Southern foundry, \$16.75 for No. 1; \$16.25 for No. 2, and \$16 for No. 3; Niagara, No. 1, \$15.80; No. 2, \$15.30.

BAR IRON—Trade is a little better, but no large quantities appear to be moving. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—Trade continues good. We quote \$2.20 per 100 lbs.

SHEET STEEL—The demand is stronger, although the quantities moving are not as large as they were two or three weeks ago. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—A little better demand is also to be noted in this line. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The demand during the past week has greatly exceeded the supply. Some large consignments are, how-

ever, expected early next week, when the difficulty will be overcome. The bulk of the trade is in United States iron. We quote as follows: Queen's Head (case lots), 16 gauge, 3 $\frac{3}{8}$ c.; 18 to 24, \$3.87 $\frac{1}{2}$ c.; 26, 4 $\frac{1}{8}$ c.; W. G. 28 gauge, \$4.37 $\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, 4 $\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, 3 $\frac{3}{4}$ c. per lb. American (ton to $\frac{1}{2}$ -ton lots), 28 gauge, \$3.75 to \$4.00; 26 gauge, \$3.20 to \$3.50; 22-24 gauge, \$3 to \$3.25. Small lots in all the above are $\frac{1}{8}$ to $\frac{1}{4}$ c. per lb. higher than figures named.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4 $\frac{3}{4}$ c.; extra large sizes, 6 $\frac{1}{2}$ to 7 $\frac{1}{2}$ c. per lb.

LEAD PIPE AND TRAPS—Trade in lead pipe is quiet at last week's advance. We quote: Lead pipe, 7c.; lead waste, 7 $\frac{1}{2}$ c., discount, 27 $\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SHOT—The demand is good. We quote: Dropped shot, 6c.; chilled do., 6 $\frac{1}{2}$ c.; buckshot, 7c. Discount, 12 $\frac{1}{2}$ per cent.

SOIL PIPE—There is not a great deal doing. Discount is 60 and 10 per cent.

PIG LEAD—The outside markets have taken a rather easier turn during the past

few days, and business is dull. Locally there is no change to note, either in regard to business or prices. We quote 4 to 4½c. per lb., according to quantity.

INGOT TIN—The primary markets are firm. Locally large quantities have changed hands during the week, although the individual lots were small. We quote 16¼ to 16½c. per lb.

INGOT COPPER—The demand shows some improvement. Values are firm. In London on Wednesday both spot and futures closed with an advance of 2s. 6d. The ruling local price is 12c. per lb.

SHEATHING COPPER—The demand for roofing purposes has been good. Ordinary sheathing has not been moving quite so freely. Braziers' has also been slow. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Shipments are only small. Wrought, ¼ to ¾ inch, 1½c.; ½ inch, \$2.25; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

RANGE BOILERS—Trade is beginning to pick up. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—The improvement noted last week has continued. Jobbers have some difficulty in supplying the demand for all-bright. Shipments are, however, expected early next week. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—Trade is a little better than it was a week ago. The larger portion of the business is in coke plates. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Much as before. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—The demand remains fair. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

TERNE PLATES—Have been going out quite freely during the week. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SOLDER—Business is moderate. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Business is moderate. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

OLD MATERIAL.

The sharp advance in pig lead makes scrap scarce at advanced prices. It is now quoted at 2¼ to 2½c., showing a rise of ¼ to ½c. per pound. Iron remains scarce as prices are still very low. The cost of handling and freights are too high to permit the supply being given to Canadian mills. There is hardly any business doing in rags; no stocks of any account are now held. They are just beginning to come in plentifully. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 7¾ to 8¼c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 5½c.; heavy red scrap brass, 6¾c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3 to 3¼c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

Trade is quite brisk; the travelers have sent in some nice orders this week. The expectations of a good fall trade seem to be realized. Business is principally in double diamond, although all grades are moving freely. Foreign quotations are firm and are for immediate delivery only. Manufacturers seem to have so many orders on hand that they are afraid that the press of business will necessitate a further advance. Some arrivals of glass are reported this week. We quote as follows: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

The paint and oil trade is feeling the stimulus of the improved condition of things. Locally there is not a good painter or decorator idle. Enquiry amongst the leading firms who use decorative material extensively discloses a most cheerful situation. They are all busy and expect to remain so to the end of the season. As hinted in our last week's issue, white lead has been advanced about 2½ per cent., or 15c. per 100 pounds, and the grinders report that the slight rise, made necessary by a stiffening of prices at corroding works, is being paid without a murmur. Dealers will do well to order liberally to avoid being caught with short stocks on a strong market. The prices of red lead are unsettled. Some houses quote higher figures, while others have not altered quotations. Castor oil remains scarce and high. Turpentine was advanced 1c. last week. Linseed oil is firmer, and the market is quite strong. Litharge and orange

mineral are advanced ½c. in sympathy with the lead market.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.22½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$5; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.25; ditto, No. 1, in casks of 560 lbs., \$4; genuine, in kegs of 100 lbs., \$4.50; ditto, in kegs of 100 lbs., No. 1, \$4.25.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—26c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10c. per lb. and 11c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 44c.; boiled, 1 to 4 barrels, 47c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 46c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—The demand has not been as good as was expected; in fact, trade has been quite dull during the week. Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3. Steerhides: 60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Business is only steady. We quote: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 65 to 75c.

WOOL—The higher prices looked for in wool have not developed, supposedly because trade was upset by the Exhibition. Business has been rather dull relatively to the expected trade. Neither is the anti-

pated quantity coming forward nor are the local factories creating an exceedingly heavy demand. Dealers are paying 19 to 20c.

PETROLEUM, ETC.

The demand for fall stocks of illuminating oils is being felt now, but the trade in lubricating oils is the biggest factor in the trade. In the course of a month, however, the heaviest orders for illuminating oils will be arriving. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

The prices of coal, in spite of the disturbances in mining, continue to show no change. The demand, however, now that fall is approaching, is becoming brisk. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Sisal rope is ¾c. dearer.

Turpentine is quoted a cent higher this week.

Terne plates are quoted at \$6 to \$6.25 for "I.C.," and \$7.50 for "I.X."

Stewart & Wood had another shipment of double-diamond glass arrive this week.

M. & L. Samuel, Benjamin & Co. are in receipt of a shipment of Butler's cutlery, including case carvers.

The factory of Peuchen & Co., Tonawanda, N.Y., was destroyed by fire a few days after the firm had removed from Toronto. Loss, about \$15,000.

H. S. Howland, Sons & Co., have received another shipment of window glass, including single and double thick, and are now prepared to fill orders for all sizes.

The McClary Mfg. Co., Limited, have put a new line of granite-ware on the market for table use. It consists of tea and coffee pots and tea cups. It is of assorted colors and handsomely decorated in raised figures.

UNITED STATES MARKETS.

NEW YORK, Sept. 17, 1897.

PIG TIN—There was scarcely a ripple on the market, although London cables came a shade lower and seemed to please the remnant of speculative interest that remains here. Purchases for consumption are still going on at a very fair rate, however, and about the usual business for out-of-town account is taking place. Prices were steady at about 13.70 to 13.75c. f.o.b. for 5-ton lots.

COPPER—Conditions generally are much the same as they have been for a week or more, with quite good shipments to Europe on old contracts, but not a great deal of new

business for either foreign or home account is taking place. Prices remain very steady at 11¼c. for Lake Superior ingot, 11 to 11½c. for electrolytic, and 10¾ to 11c. for casting stock. London cables noted heavier speculation, but no important turn in prices.

PIG LEAD—Operations were on a moderate scale, and the demand from all quarters seemed lifeless. There were no really extensive offerings, yet enough to give the market slightly easier appearance, with 4.30 to 4.35c. about the prices for common domestic. London cable quoted £13 11s. 3d. for soft Spanish.

SPELTER—About the ordinary carload lot business is taking place, but otherwise little business transpires here and prices remain at 4.30c. for eastern deliveries. London cable quoted £17 7s. 6d. for good merchant brands.

ANTIMONY—The market remains quiet but steady, with prices at 7¼ to 8¼c., according to brand and quantity.

TIN PLATE—The market was quiet, with little or nothing more than ordinary jobbing business, and prices steady.

IRON AND STEEL—Pig iron is quite steady at unchanged prices, with fair business and demand virtually the same as for about a week past. Steel rails are quiet and unchanged. Practically the same is to be said of other heavy steel, as far at least as the New York market is concerned.

MANITOBA MARKETS

WINNIPEG, Sept. 17, 1897.

DURING the past week there has been a noticeable increase in the demand for both shelf and heavy hardware.

This improvement is probably due to the successful results of agricultural operations all over the country and the high prices being obtained for farm products of all kinds. The increased demand is principally for cutlery, house furnishings, guns and ammunition. There is also a moderate amount of building hardware, though the improvement in this latter branch will not be fully felt until next spring. In one line, however, that of elevators, the building business is being pushed with much vigor. The new wheat firm of Love, Tryon & Bread, who started in to build 15 elevators this season, soon found that this would not be sufficient to accommodate their trade and are now straining every nerve to complete 20. There seems to be a general firmness in prices, but not many changes. Last week, owing to Labor Day, there was no market to be had.

WIRE NAILS—The demand has been quite active the past week, and a heavy volume of business has been done. Prices are firm on the basis of \$2.65 per keg. Cut nails are also in good demand and prices are unchanged at \$2.50 basis.

BARB WIRE—No new features in this trade to report. There is still a small demand, with prices ranging from \$2.60 for barb wire to \$2.75 for plain twisted and staples.

WROUGHT IRON PIPE—Although an advance in price has been reported by the manufacturers, prices are unchanged here. A moderate amount of business is being done. We quote: ¼-in., \$2.60; ⅜-in., \$2.75; ½-in., \$3; ¾-in., \$4; 1-in., \$5; 1¼-in., \$7; 1½-in., \$8.50; 2-in., \$11.50; over 2-in., 70 per cent. discount.

BAR IRON—Business in bar iron is fair, with prices ruling at \$2.10 basis.

SHEET IRON AND GALVANIZED IRON—Sheet and galvanized iron are in good demand. Dealers report heavy sales, especially in galvanized iron. Prices are as follows: Black sheet iron, 24 to 28-in. gauge, \$3.50 to \$4; galvanized iron, 24-in. gauge, \$4; 26-in. gauge, \$4.25; 28-in. gauge, \$4.50.

HORSESHOES AND HORSE NAILS—There is very little doing in these goods. Prices remain the same as last reported, viz.: Horseshoes, \$4; snowshoes, \$4.25; horse nails, 45 per cent. discount.

BUILDING PAPER—Is in good demand. We quote; Cyclone and Anchor, tarred,

BUSINESS CHANCE.

PARTNER WANTED IN A GROWING HARDWARE BUSINESS in a live town in B. C.; one who can command a capital of \$5,000 and not afraid to rustle; correspondence solicited. Address, J. V., care **HARDWARE AND METAL**, Toronto. (40)

DOMINION FLINT PAPER CO.

Hamilton, Ont.

Supplying the Canadian demand with Improved Paper to sand paper the whole Dominion.

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Barrister, Solicitor, Notary, Etc.

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Tandem
Anti-Friction
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MONTREAL.



WANZER.

Improved Wanzer Lamp

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER LAMP & MFG. CO.
HAMILTON.

70c. per roll; Cyclone and Anchor, plain, 55c. per roll.

BELTING—There is a good sale for end less rubber belts for threshers' use. Discounts are: 60 and 10 per cent. for Lion and Star, 50 and 10 per cent. for Redstrip and extra heavy Star.

AMMUNITION—Chicken shooting opened on Wednesday, 15th, and as the birds are said to be scarce, the knights of the dog and gun are making good the earliest opportunity to get after them. Dealers report heavy demand for guns and ammunition and all classes of sporting goods. An advance in the price of shot has been made, and it is now quoted at \$6 per 100 lbs. for ordinary and \$6.50 for chilled. A feature of this year's ammunition trade is the increased demand for a smokeless loaded shell. "Robin Hood Champion" is quoted at \$18 per 1,000 for 12 gauge ordinary short with usual extras for 10-gauge and shells loaded with chilled shot.

WHITE LEAD—Pure, \$6 per 100 lbs. This price is held very firm.

CEMENT—The approaching close of the season has led to a considerable demand for cement. Prices range at \$3.75 for Canadian, \$4 for English and \$4.25 for Josson.

THE BADEN OIL COMPANY.

It has been decided that the Baden linseed oil manufactory shall continue operations, and for that purpose a joint stock company has been formed under the Ontario Companies' Act. Those who have been incorporated are: Peter Livingston, John Livingston, Philip Erbach, William Henry Erbach and Edward Liersch. The style of the company will be the Livingston Linseed Oil Co., Limited, and it is to manufacture and dispose of linseed oil. The business heretofore carried on by J. and J. Livingston is to be acquired. The total capital stock is \$200,000, divided into 2,000 shares of \$100 each.

THE YUKON TRIPLE HEATER.

A new wood heater is being put upon the market by the McClary Manufacturing Co., Limited. It is called the Yukon Triple Heater. It is a handsome and powerful heater. A sample attracted much attention at the Toronto Industrial Exhibition last week. The company are working night and day to have it on the market next month. It is to be made in two sizes.

PERSONAL MENTION.

Mr. James Hardy, accountant at R. & T. Jenkins', Toronto, is holidaying in Muskoka.

Mr. C. Holdenby, of Sanderson Percy & Co., who had the misfortune to have a rib broken in a bicycle collision, is back attending to business this week. He seems to be a quick man at repairs.



Our Trade Mark.

Every Painter's Brush we make is branded with our name or trade mark. We believe this brand helps us and you to sell our Brushes. Many of your customers are familiar

with it. Those who are not—will be soon. It stands for brushes that are made on honor—made right!

Chas. Boeckh & Sons, Mfrs., Toronto, Ont.

Every Range
Guaranteed.

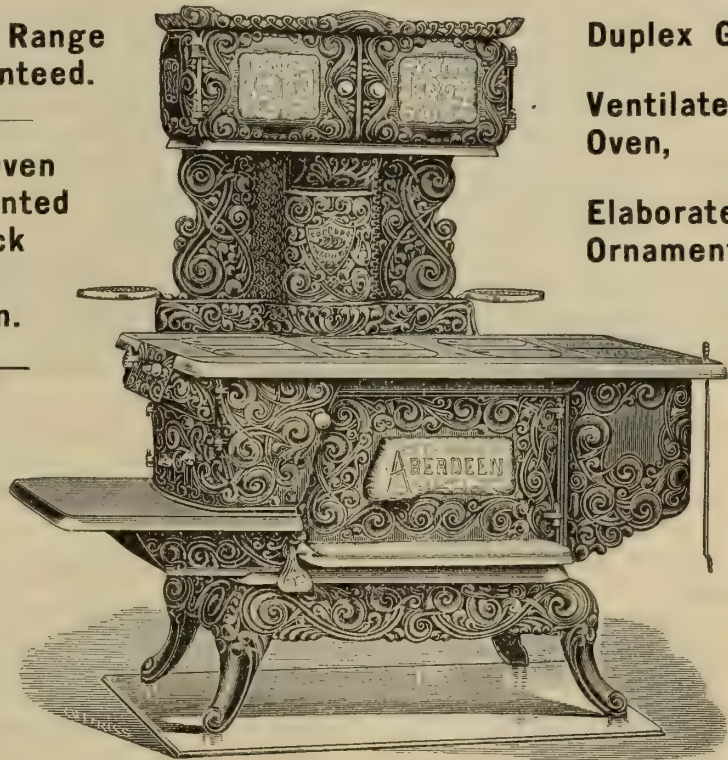
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Warranted
Quick
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Duplex Grate,

Ventilated
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Elaborate
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Long
Fire-
Box
for
Wood



Aberdeen Warrior Range

Our New and Beautiful Range

has been on the market one year, and of the many sold there has not been a single instance of failure.

The Aberdeen is remarkably handsome in appearance, and, as will be seen from the engraving, is of the very latest style and construction.

The COPP BROS. CO., Limited
HAMILTON

Plumber and Steam-Fitter

AN ENTERPRISING FIRM.

IT is a well-known fact in plumbing circles that the profits to be obtained on contracts have, during the last few years, been considerably reduced. This, of course, is easily explained, for it is only another result of progress. Formerly, whenever a plumber wished a pipe cut he had to take it either to his shop or to some machine establishment. On that account much time was wasted, which now is saved by firms of large capital, who can afford to purchase specialized machinery, and move it from one building to another. This is only one way in which the plumbing business of today differs from that of a few years ago. The plumber's time is valuable, and where any device can be instituted to save time it generally pays to do so. Some firms have obtained these time-savers, and can now undersell those who have not.

However, it is not necessary, indeed it is not wise, that all plumbers should get this machinery. If each establishment should increase its efficiency by additional material capital, enough work could not be obtained by each to make this capital return a proper rate of interest.

But there are other ways of getting out of the difficulty. For instance, plumbers may branch out as specialists in one of their side lines. A sample of the industry and forethought in this respect is to be seen in the action of the Keith & Fitzsimons Co., Limited, King street west, Toronto. It has always been their aim to excel in gas-fittings and brass work of all kinds, and they are now directing their business more in this direction.

At present a great portion of the brass goods used in Canada has been manufactured in the United States; only a couple of firms in Canada manufacture brass goods. Keith & Fitzsimons Co., Limited, however, believe that we can utilize our own labor and supply our own wants in this respect, and certainly it is quite reasonable that we should. This firm has lately turned out some work in this line, and if the quality and appearance of these goods are to be taken as any key to the future, we may predict a huge success for the enterprise of this Toronto establishment.

One difficulty they expect to meet with is the lack of sufficient patronage to warrant

a continuation of this special manufacture. However, this difficulty is almost sure to be overcome in time and more particularly in the good times coming.

They have lately completed the work of lighting the new Jewish Synagogue in Toronto. In this building have been placed combined gas and electric fixtures. Gas fixtures have also been placed in the Memorial Baptist Church, Tecumseh street, Toronto. Combination fixtures are to be placed in the North American Life Building by this firm. Several private dwellings are having magnificent fixtures, in both combination and single styles, placed this fall. The firm has received the contract for fitting the Dominion Express Co.'s new building in Winnipeg with electric fixtures, and some handsome chandeliers are being made for this work.

Another pretty production of the Keith & Fitzsimons Co., Limited, is a memorial brass lectern which is for St. Mark' Church, at Niagara-on-the-Lake. A large figure of a lion is the support, and it gives the work a fine appearance.

AMERICAN CAST-IRON PIPES.

Some time ago I alluded to the great development of American competition in various lines in iron and steel, and amongst other things I mentioned cast-iron pipes. I was well aware, when I made this allusion, of what was being done, and I am now equally well informed when I say that offers have been made to supply firms in London with pipes of this class for use in England, or certain of our colonies, at \$15, or equal to about £3 per ton, f.o.b., at specified United States ports. If this price is one which can be actually quoted, I think it is

pretty clear that our own pipe founders cannot touch it. I am assured on most reliable authority that the price I name is one at which orders would be booked and at which sales are being made in the United States.

But I am somewhat of "a doubting Thomas" in these matters, and I take the liberty of saying that the "figures don't work" properly to my mind. You recorded last week that a Philadelphia house had quoted £7. 10s. per ton for cast-iron pipes, delivered at Douglas, Isle of Man, whereas a British house "put in" at £5. 10s. Moreover, the lowest price, so far as I can ascertain, for foundry pig in the United States is \$9.25 per ton at the works, or say 38s., and even that is in the Southern States, a long distance from tide-water. With an average of, say, 40s. for the pig iron, there does not seem to be any margin with the selling price at 60s. Until the American makers modify their usage as to the lengths of pipes, etc., I do not think they will capture any British orders, but they may get hold of some for the colonies and other outside markets.—"Vulcan" in Ironmonger.

REGARDING WHITE LEAD.

The Canada Paint Co., have issued the following circular from their Toronto branch at 90 Bay street: Owing to the continued advance in all departments of the lead market we are obliged to withdraw quotations for white and red lead. At present the price for our brands of white lead shipped from our Toronto factory is as follows: Genuine Elephant, Decorators Pure, \$5.50 per 100 lbs.; Elephant No. 1, Peerless, \$5.12½; Bulls Head, London Best, \$4.75; Imperial, Sheffield, \$4.37½; Royal Crown, B.N.A., \$4.

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power.)

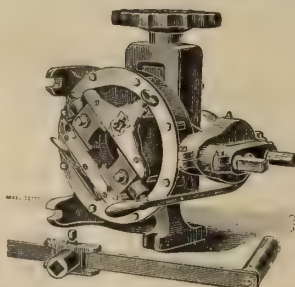
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

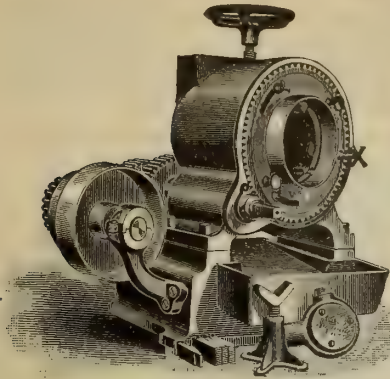
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

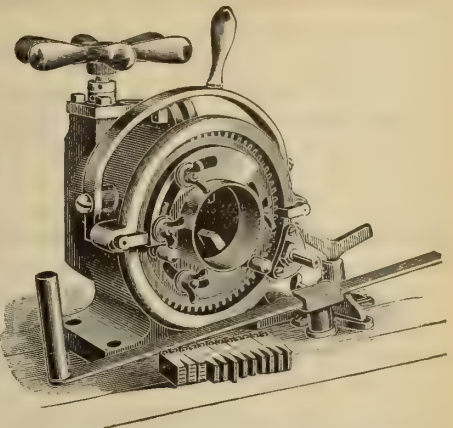
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{2}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

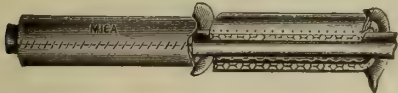
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

**SMALL
RUBBER
GOODS**

**MOULDED
RUBBER
GOODS**

H.O. CANFIELD - BRIDGEPORT, CT.

PLUMBING CONTRACTS.

Purdy, Mansell & Mashinter, Toronto, have the contract for the steam heating of Loretto Convent at Stratford.

J. P. Conroy, of Montreal, has secured the contract for the plumbing, heating, ventilating and gas-fitting of two houses for Mr. McCarty.

The Bennett & Wright Co., Limited, Toronto, have secured the contract for the steam heating of the new building in Ottawa being erected by the American Bank Note Co. They are also going to hot-water heat three cottages at the Gravenhurst Sanitarium.

PLUMBING NOTES.

The St. Thomas City Council, last Tuesday evening, decided to take a vote on the choosing of a site for the new City Hall on October 11. If the Idsardi property is purchased, the hall will cost \$30,000; if the Ellison property is purchased, the city will wait for the hall till it is in a better financial position.

The Executive Committee of the Canadian National Master Plumbers' Association have several cases of rather a disagreeable nature on their hands just now. It seems that a misunderstanding has arisen down east in regard to what supply houses shall not sell to private individuals. The matter was under consideration this week. Similar unpleasant occurrences happened last year.

BOYS WITH NO CHANCE.

AT a banquet in Lyons nearly a century and a half ago a discussion arose in regard to the meaning of a painting representing some scene in the mythology or history of Greece. Seeing that the discussion was growing warm, the host turned to one of the waiters and asked him to explain the picture. Greatly to the surprise of the company, the servant gave a clear and concise account of the whole subject, so plain and convincing that it at once settled the dispute.

"In what school have you studied, Monsieur?" asked one of the guests, addressing the waiter with great respect. "I have studied in many schools, Monsigneur," replied the young servant, "but the school in which I studied longest and learned most is the school of adversity." Well had he profited by poverty's lessons; for, although then but a poor waiter, all Europe soon rang with the fame of the writings of the greatest genius of his age and country, Jean Jacques Rousseau.

The smooth sand beach of Lake Erie constituted the foolscap on which, for want of other material, P. R. Spencer, a barefoot boy with no chance, perfected the essential principles of the Spencerian system of penmanship, the most beautiful exposition of graphic art.

With thirteen halfpence in his pocket,

William Cobbett started on foot to find work in the King's Gardens at Kew. "When my little fortune had been reduced to threepence," he says, "I was trudging through Richmond in my blue smock-frock and my red garters tied under my knees, when, staring about me, my eyes fell upon a little book in a bookseller's window, on the outside of which was written, 'The Tale of a Tub. Price 3d.' The title was so odd that my curiosity was excited. I had threepence, but then I could not have any supper. In I went and got the little book, which I was so impatient to read that I got over into a field at the upper corner of Kew Gardens, where there stood a haystack." Here he read until he fell asleep, to be awakened by the birds at dawn. He found work at Kew, and for eight years followed the plough, when he ran away to London, copied law papers for eight or nine months, and enlisted in an infantry regiment. During his first year of soldier life he subscribed to a circulating library at Chatham, read every book in it, and began to study.

"I learned grammar when I was a private soldier on the pay of sixpence a day. The edge of my berth, or that of the guard-bed, was my seat to study in; my knapsack was my bookcase; a bit of board lying on my lap was my writing-table, and the task did not demand anything like a year of my life.

I had no money to purchase candles or oil ; in winter it was rarely that I could get any evening light but that of the fire, and only my turn even of that. To buy a pen or a sheet of paper I was compelled to forego some portion of my food, though in a state of half starvation. I had no moment of time that I could call my own, and I had to read and write amidst the talking, laughing, singing, whistling and bawling of at least half a score of the most thoughtless of men, and that, too, in the hours of freedom from all control. Think not lightly of the farthing I had to give now and then for pen, ink or paper. That farthing was, alas ! a great sum to me. I was as tall as I am now, and I had great health and great exercise. The whole of the money not expended for us at market was twopence a week for each man. I remember, and well I may ! that upon one occasion I had, after all absolutely necessary expenses, on a Friday, made shift to have a half-penny in reserve, which I had destined for the purchase of a red herring in the morning, but when I pulled off my clothes at night, so hungry then as to be hardly able to endure life, I found that I had lost my half-penny. I buried my head under the miserable sheet and rug, and cried like a child."

But Cobbett made even his poverty and hard circumstances serve his all-absorbing passion for knowledge and success. "If I," said he, "under such circumstances could encounter and overcome this task, is there, can there be, in the whole world, a youth to find any excuse for its non-performance?"

Humphry Davy had but a slender chance to acquire great scientific knowledge, yet he had true mettle in him, and he made even old pans, kettles and bottles contribute to his success, as he experimented and studied in the attic of the apothecary store where he worked.—Pushing to the Front.

"My son," said the graybeard, "you are about to go forth to do battle with the world."

"Yes, father," answered the young man.

"One of the first things you should learn, my boy," the old man continued, "is to learn to say 'no.'"

"I think I understand."

"I dunno whether you do or not. The point I am trying to get at is that the habit of saying 'naw' and 'nit' was all right while you were in college, but it ain't the correct thing for a business man."—Cincinnati Enquirer.

The people of Berlin are again complaining of the slow and irregular service between Berlin, Waterloo and Toronto, and accuse General Manager Hays of cheese-paring.

The Baltimore and Ohio road, which was the first to carry bicycles free of charge, has advanced a stage further by agreeing to check wheels, and assume responsibility for damage, as is done in the case of other

baggage. A liberal treatment of wheelmen in this respect is likely to prove good policy, for the more freely 'cyclists can travel with their wheels the greater the revenue they will pay the railroads.

HARDWARE DEALERS' MAGAZINE

Largest Circulation in its field in the World

One Dollar
a Year.

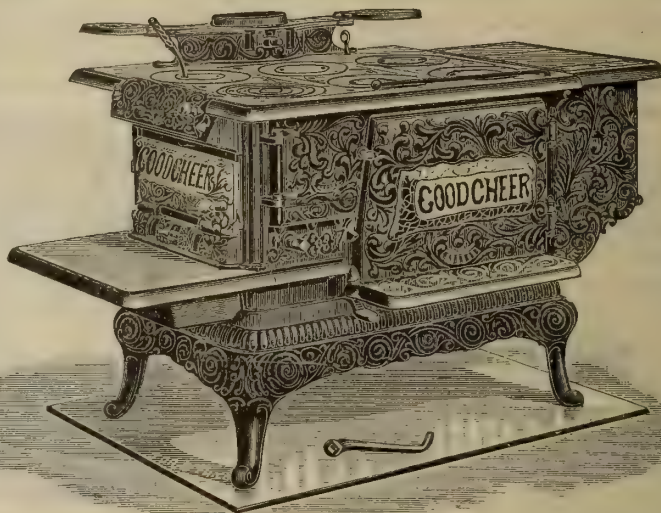
D. T. MALLETT, Publisher
271 Broadway, New York

Specimen
Copy upon
Request

Good Cheer Ranges

LARGE
STEEL
OVENS

Threestyles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

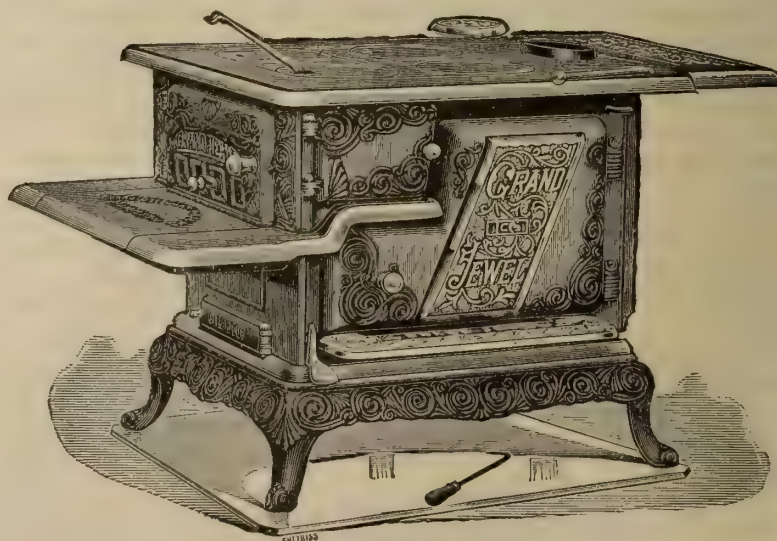
WOODSTOCK, ONT.

GRAND JEWEL COOK STOVES...

For WOOD
and for COAL.

With
Patent
One-piece
Cold-rolled

SHEET
STEEL
OVEN.



Burrow, Stewart & Milne

HAMILTON, ONT.

Manufacturers of all kinds of

"JEWEL"

Stoves, Ranges, and Hot Air Furnaces.

Agents for Manitoba and
Western Territories

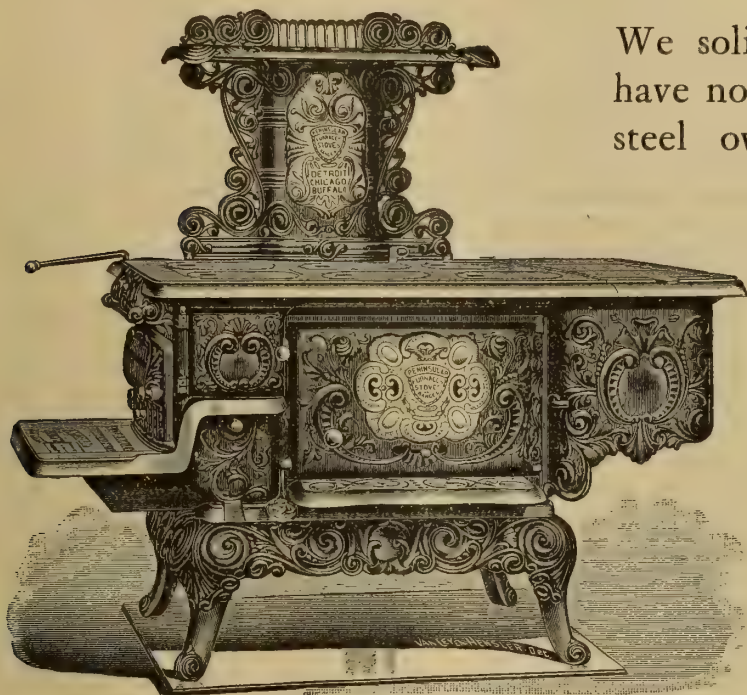
Merrick, Anderson &
Co.,

WINNIPEG.

Agents for the Province
of Quebec, Nova Scotia
New Brunswick and
Prince Edward Island.

W. L. Haldimand &
Son,
MONTREAL

THE GRANITE RANGE



We solicit sample orders from dealers who have not yet secured control of this handsome steel oven range. Customers who placed samples on their floors are sending in many repeat orders, and acknowledge it to be the prettiest appearing range on the market.

They are guaranteed to be perfect workers in every respect.

MAY WE SHIP YOU A SAMPLE ?

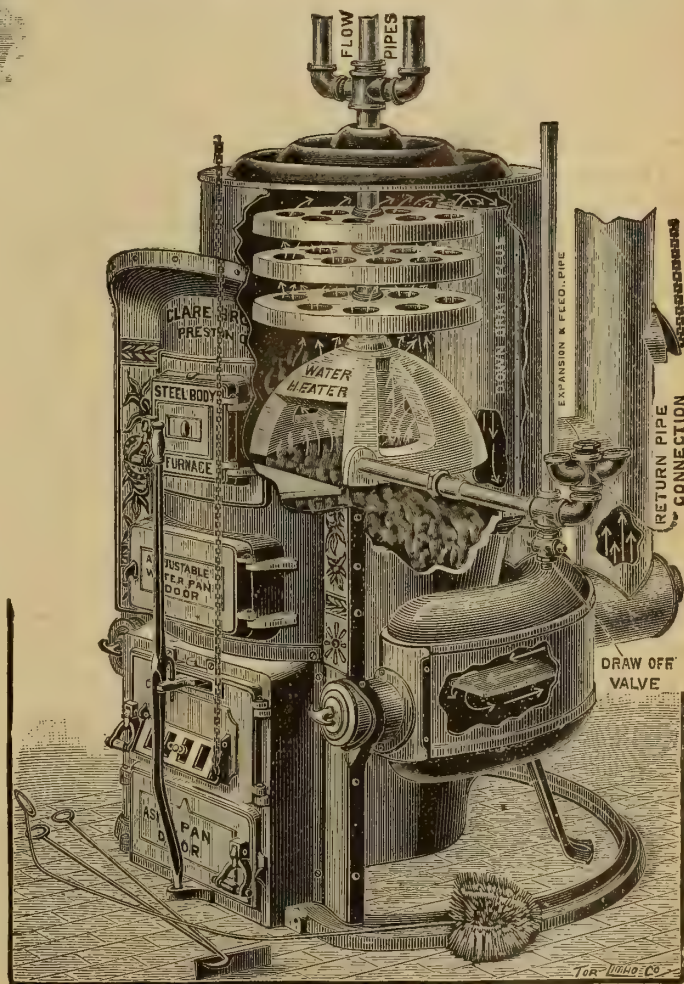
Combination Heating

(WARM AIR AND HOT WATER)

The accompanying cut shows our "Marvel" warm air furnace with water heater fitted in dome. Live dealers find that they can very largely increase their sales by acquainting customers of the advantages of our combination system of heating. Besides, many customers have warm air furnaces who can be induced to add a few Hot Water Radiators, thereby increasing heating capacity of furnace with consequent economy of fuel.

New Hot Water Boilers and Radiators

We are supplying a complete line of our new Hot Water Boilers and Radiators. They embody many novel and superior points of construction, and are exciting much interest among dealers who have seen them. Ask us for cuts and prices.



CLARE BROS. & CO. PRESTON, ONT.

Branches { 160 McGill St., MONTREAL
180 Market St., WINNIPEG

HISTORY OF DEPARTMENT STORES.

THE idea of department stores was originated in New York City by a firm dealing in dry goods. They had a small store or shop at what was then a central retail corner, but with a floor space not much greater than that occupied by the average dry goods merchant in a town of 10,000 or 15,000 inhabitants. They confined their business to their own line for a few years and then they branched out into house-furnishings, as these firms always do. Their trade in these goods was successful, and from time to time they added other goods and gradually enlarged their establishment, until now they sell almost every article of retail merchandise and have the second largest store in New York. Incidentally, the largest store building there is occupied by a rival firm from the west which has recently opened up a branch house and strives to divert a considerable part of the other's trade. But the house first mentioned was not permitted, even from the start, to monopolise the department business. Other dry goods firms increased their lines in order to meet the competition thus presented, and their numbers grew until now there is not one large dry goods house in New York that does not carry additional lines. In due time the idea was developed throughout the country, and now every one of our large cities has its own department store or several of them. Chicago has a dozen or more and St. Louis six. There is but one large dry goods store in St. Louis that attends strictly to its own business, and there are a great many people who prefer to patronize it on this account.

What these stores are in their effect on distributed business may best be ascertained by a description of one of the largest. Its name and location need not be given, since it is merely an illustration of the others. The firm occupies a building covering one-half of a city square, and pays an annual rental in excess of \$400,000. The floor space is equal to about sixteen acres. About 3,500 clerks, most of them being women, are employed, but this number does not include the office force, nor the 300 assistant cashier or check girls. The total number employed is in the neighborhood of 4,000, and while the figures on the payroll can only be estimated it is safely within the limits of conservatism to place them at \$50,000 a week, or \$2,600,000 a year. The statement is made by a business man in a position to know of what he speaks that the firm must take in no less than \$24,000 a day before it can realize any profit. On this basis, it must do a business aggregating at least \$13,000,000 yearly, but that it does more than this is shown by the fact that its methods are systematized so as to ensure a

profit on the total amount transacted, and by the more general statement that the partners are not in the business for their personal health. Financial health is the one consideration, and it is a reasonable estimate that the amount of their sales has averaged \$16,000,000 annually during the last three or four years.

How much of this vast amount has been diverted from the smaller retail trade in the adjacent or contributing territory? Let each dealer figure it out for himself, basing his estimates on his diminished receipts.

There is nothing new under the sun, and there is nothing within the range of human, living wants that cannot be obtained under this roof. It has meats and the apparatus to cook them; groceries and the utensils for their preparations. Heating stoves and furnaces are sold, with the fuel to supply them. The carpenter can buy his tools and his other metal goods with as much ease as he can provide himself with a suit of clothes, or his wife with a dress, or his children with shoes. The stove and hardware dealer can supply his personal wants in any direction—if he cares to go away from his own neighborhood—and there is no line of retail trade that is not here represented. It is a vast aggregation of all lines, under one roof and one management, with a heavy cash capital that is used to influence if not to control the output of many manufacturers, and, in consecutive course, to act as a menace to the smaller retail trade and to tempt the public patronage under the guise, most successfully veiled, of "cut-throat prices and bargains." Its success, then, depends upon these conditions, namely, the yielding of the manufacturers, the gullibility of the public and the loss to the smaller trade. These conditions are assured, since the establishment is a pronounced success.

Do the manufacturers care to be controlled? Does the public wish to be deluded? Will the retail trade submit to a loss? Let each class answer in its proper turn, and the retailer should come first.

It should not be understood that bargain sales or lower prices are not made at these department stores. These can be obtained every day, in certain lines, on every day of the week. But are they legitimate? As a rule, no! One illustration will suffice. A department store advertised last week that it would sell certain lines of cooking utensils at prices below the cost of manufacture. Investigation by a well-posted buyer, who was acquainted with the list and discounts of the manufacturers, showed that the advertisers had told the truth. They were actually selling these goods at from 15 to 40 per cent. below the net price fixed by the makers, and at proportionately less figures than those representing first cost. They

had a right to do this; they even had a right to give away the goods and attach a dollar bill, or a ten or a twenty, to each article sold. But what was the object of their seemingly sacrificial sale for the good of humanity? Nothing less than to draw the crowds to the store, with the bait of low prices on one line to conceal the hook on the higher prices of others, to check the competition of the smaller dealers in cooking utensils and to increase their orders to the manufacturers so that the latter might be induced to sell them the goods because they were supposedly profitable customers. This is but one instance, yet it is repeated every day.

As has been stated, the business of these department stores is not confined to their immediate locality nor to the city in which they are allowed to exist. Their sales are as large and as well distributed as their influence is hurtful upon trade. They not only injure or destroy the business of the smaller dealers in their own city, but through a well-arranged mail order system they extend their sales throughout the adjacent and, in some cases, the distant trade territory, advertising in the local papers, sending circulars, catalogues and price lists to the better known people, and, in at least one instance, having an agent in each of the larger towns whose business it is to drum up trade and take it away from the local merchants. They have an undisputed legal right to adopt this policy in their business, even though its effect on the retail trade may be to drive it away from the communities where it exists and to deprive such communities of the capital and enterprise which are justly their own.

This matter is now thoroughly well understood. Now for the remedy. Legislation cannot be effective. Special taxation is unconstitutional when levied by the State. It is even doubtful if any Legislature would enact the necessary measure, whether unconstitutional or not. A city ordinance might provide a partial relief, but the cities will not enact one. In short, the resources of the law are exhausted before they are tried. Yet there is a remedy, and it is one which the retailers everywhere should be the first to employ. It is not found in a combination, nor in the justly hated and un-American boycott, but in a firm and continued purpose with every retail dealer, in all lines and wherever located, to patronize his trade neighbors and to use every legitimate effort to induce these neighbors to deal with him. Of almost equal use and importance is the making of an effort with the non-mercantile buyers in or about his town to confine their purchases to the dealers in that town, himself included, and by so doing to build up and perpetuate that unity of

commercial interest which is always essential to the success of any community.

Help your neighbor and he will help you! Reciprocity in business is the keystone of the arch. Remove it, and you destroy the entire fabric. There is, there must be, such an arch in every town or village. You are a part of it, Mr. Dealer. So are your trade neighbors, so are your fellow townsmen. They are, with you, constituent parts of a structure that is held in place by the common bond of self-interest, at once the strongest and weakest trait of human nature. But you and they can make it strong in the present case, and, in so doing, build up what others may seek to destroy.—Stoves and Hardware Reporter.

A HEAVY HALIFAX FIRE.

A fire on last Saturday afternoon at the premises of A. M. Bell & Co., hardware dealers, Upper Water street, Halifax, caused a loss to building and stock approximated at \$40,000.

The stock was roughly appraised at \$40,000 and was insured for \$32,000. It was badly damaged by fire and water. Very little was removed. The stock was not unusually heavy, but the firm had commenced to take in fall stock. A large quantity of the firm's heavy stock was kept at the factory in another part of the city. A. M. Bell

& Co. will take other premises in the immediate neighborhood of their burned store at once. Then business will not be seriously interrupted by the fire. A certain number of papers and books, which were in the office and half burned or damaged by water, can be replaced.

THE TENDENCY TO SPECIALIZE.

While there is a tendency to concentrate different lines of business under one roof, there is also the opposite tendency to specialize and split up certain lines of business. There is an analogy to the department store system in the old style trade papers, which represented different lines of business in one town. A paper could be devoted to the hardware trade, the drug trade, the grocery and dry goods under one cover, by devoting certain space to each trade, but as soon as a special grocers' paper is started the grocery department in the composite paper loses its value, and as the cities grow the various trades represented in one paper are finally all represented by a special paper devoted to one line. The old style grocery store in this city has also been affected by the tendency to specialize them. There are fruit stores, butter and egg stores, delicatessen, butter-milk and pot cheese stores by the score in this city, where formerly only the grocer was to be found and the occasional fruit peddler. —Merchants' Review.

VALUE OF ECONOMY.

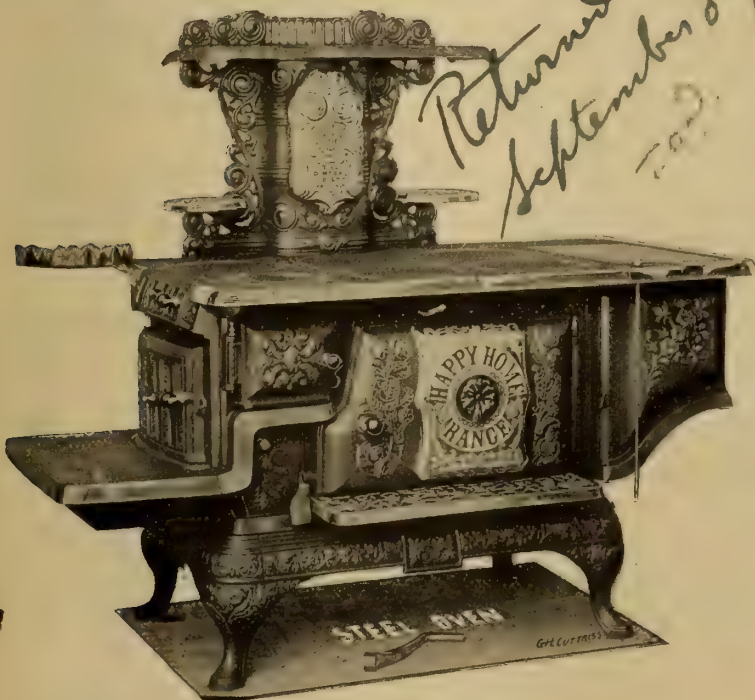
Our people realize, as never before, the value of economy, remarks Mercantile Journal. The hard times of the last five years have been an object-lesson on this subject that should never be forgotten. People who save nothing from their wages must expect to suffer when wages cease.

A valuable lesson in economy comes from Belgium. Some time ago the children in one of the public schools in Brussels were requested by their teachers to gather up all the waste and apparently useless articles that they could find, on their way to and from school and to deliver them to their respective teachers.

For eight months the work of collection went on. Such objects as tin foil, tin cans, paint tubes, bottle capsules and refuse metal were especially looked after. The result was astonishing. Nineteen hundred and twenty-five pounds of tin foil rewarded the children's efforts, together with 1,200 pounds of metal scraps, 4,400 pounds of bottle capsules and old paint tubes that in the aggregate weighed 220 pounds.

But it was when the articles were disposed of and the money applied to useful objects that the full force of this economy was manifest. The proceeds completely clothed 500 poor children, and sent 90 invalid children to recuperation colonies, and there was a goodly balance left to be distributed among the sick poor of the city.

Moore's "HAPPY HOME RANGE"



~ 1897 ~

Nothing

will increase your business more or make your success more permanent than to

Satisfy your Customers

You can sell the "Happy Home Range" with every assurance that your customer will be thoroughly satisfied.

"THE HAPPY HOME"

possesses many features of utility and convenience not found in other ranges.

IT IS up to date,
a beauty in appearance,
economical on fuel,
perfect in operation,
made in all desirable styles
and sizes.

SAMPLE ORDERS SOLICITED.

Mfd. by... THE D. MOORE CO. Limited, HAMILTON, CAN.

Watch for our Double Heater "Todd."

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

JOSEPH LACASSE, general merchant, St. Hermas, Que., has assigned to Lamarche & Benoit.

Jules Parent, general merchant, Beauport, Que., has assigned.

Alfred Duchene, general merchant, Roberval, Que., has assigned.

George Audet, general merchant, Les Eboulements, Que., has assigned.

James Cameron, general merchant, Springhill, N. S., has assigned.

Thomas W. Cale, painter, etc., Stratford, Ont., has assigned to Wm. Macklin.

R. J. Latimer, dealer in carriages and implements, Montreal, has assigned.

The Thomas E. Henderson Co., brass goods, etc., Montreal, have assigned.

S. T. Suggitt, tinsmith, Grand Valley, Ont., has assigned to George Nicholson.

Joseph Major, general merchant, Orleans, Ont., is offering to compromise at 45c. on the dollar.

C. Langford, wagon maker and blacksmith, Wiarton, Ont., has assigned to D. M. Jermyn.

H. Girard, general merchant, Lacolle, Que., is offering to compromise at 50c. on the dollar, cash.

C. W. Henderson, dealer in electrical supplies, Montreal, has assigned. A meeting of the creditors is to be held on the 23rd inst.

PARTNERSHIPS FORMED AND DISSOLVED.

McCord & Neil, leather dealers, Quebec, have dissolved.

L. B. & L. Charron, wood and coal dealers, Montreal, have dissolved.

Eusebe Tardif and L. O. Tardif have formed a partnership in Levis, Que., to trade as general merchants under the style of E. Tardif & Fils.

Aaron G. Clough and Leon L. Clough have formed a partnership in Ayers' Falls, Que., to trade as general merchants under the style Clough Bros.

Benjamin Schwartz and Mrs. Levi Taule

have formed a partnership in St. Casimir, Que., to trade as general merchants under the style of B. Schwartz & Co.

Isale Dugas, Pierre Dugas, and Theophile Dugas, Montreal, have formed a partnership, to trade as contractors under the style of Dugas & Co.

Louis M. dit Napoleon Monette and Silois Monette have formed a partnership in Montreal to trade as contractors, under the style of Monette & Fils.

Elias Gingras and Jean Baptiste Tremblay have formed a partnership in Montreal to trade as contractors under the style of Tremblay & Gingras.

George E. Vanbuskirk and Robert Bauld have formed a co-partnership in Halifax, to trade as dealers in coal under the style of The Halifax Coal Co.

SALES MADE AND PENDING.

Wm. Tigh, Leskard, Ont., is advertising his general business for sale.

Gedeon Dufour, Les Eboulements, Que., has sold his stock at 40 cents on the dollar.

The assets of Alexander & Lefebvre, bicycle dealers, Montreal, were sold by auction 14th inst.

CHANGES.

H. Aldous, Lorlie, N.W.T., is opening out a general business.

Boulard & Boucher have started a hardware business in Montreal.

George Sutherland, blacksmith, Kaslo, B.C., has sold out to J. B. Henniger.

Geo. Gawley & Co., coal dealers, Victoria, B.C., have sold out to Baker & Colston.

S. McDowell, harness maker, Spring Hill, N.S., has been succeeded by Houston & Jarvis.

A. O. Bilodeau, general merchant, Kingsley Falls, Que., has removed to Windsor Mills.

Love & Tyron, general merchants, Grenfell, N.W.T., have sold out to B. Frank, Pheasant Forks.

It was noted in last week's issue that H. H. Otton & Co., Barrie, Ont., had been

succeeded in their hardware business by J. H. Neeland. It should have read that they were succeeded in the plumbing and tin-smithing departments by J. H. Neeland.

John Paul, general merchant, Burin, Newfoundland, has sold out to H. J. Paul and S. C. Hussey as Paul & Co.

The hardware stock of J. E. Bigaouette, Quebec, has been purchased by Ulric Drouin, who has commenced the hardware business.

FIRES.

B. E. Goyette, general merchant, Magog, Que., has been burned out.

W. A. Campbell, general merchant, St. Martins, N.B., has sustained \$2,500 loss by fire. No insurance.

David O'Neil, blacksmith, South March, Ont., has been burned out.

The stock of harness of H. V. Moore, Woodstock, N.B., has been damaged by fire. Insurance \$800.

The warehouse of Balman Bros., dealers in agricultural implements, Woodstock, N.B., has been burned. Insured.

A. M. Bell & Co., hardware merchants, Halifax, have been burned out. Loss covered by an insurance of \$32,000. Business to be resumed.

DEATHS.

F. W. Beckman, lumber merchant, Ellershouse, N.S., is dead.

Mrs. E. M. Currie, of E. M. Currie & Son, general merchants, West Dublin, N.S., is dead.

SHERBROOKE AND VICINITY.

Business in this section is looking up. Farmers and storekeepers are buoyant over the crop prospect and prices.

Magog has been visited by a large fire, burning the E. T. Bank building, Dolloff's block and A. D. Martin's carriage factory.

Travelers are all out on the road in this section, and report a good trade.

Magog is putting in an electric light plant.

Globe Files and Rasps

ARE THE STANDARD.

Made from the very best grades of Crucible Cast Steel, and every file and rasp stamped "GLOBE CO." is warranted, and should a file of our make prove unsuitable for the work for which it is required we will cheerfully replace the same on application.

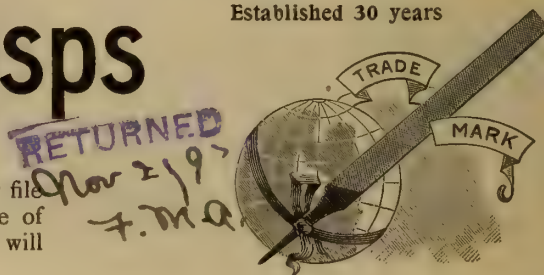
LARGEST

**DEMAND
PRODUCTION
VARIETY
STOCK**

For sale by all the leading Hardware Merchants in the Dominion, from Halifax, N.S. to Victoria, B.C.

Prices Always Right

Established 30 years



If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

CATALOGUES, BOOKLETS, ETC.

GAME LAWS.

The Union Metallic Cartridge Co., of Bridgeport, Conn., have just published the game laws of the United States and Canada. It is in book form, of such size that it may be carried with convenience in the pocket, and contains eighty pages. It will be particularly useful for those who shoot game, because everything relating to the fish laws is omitted, but apparently everything relating to the game laws is given in a lucid, but condensed, manner. The paper is good, the type large and clear, states are arranged alphabetically and each subject is under a conspicuous sub-heading, enabling those who are seeking information to find it quickly. The publication is for free distribution, and may be procured by addressing the Union Metallic Cartridge Co. at Bridgeport, Conn., or 313 Broadway, New York.

THE MONEY QUESTION.

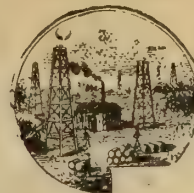
Henry V. Poor, the author of so many works on economic subjects, has issued another book entitled "The Money Question." The chief object of this work is to advocate the emancipation of the banks of the United States from the burden now imposed upon them in the form of security for their circulation. He explores the money question to its foundation and comes to the conclusion that to avert the calamities threatened by the present unsatisfactory condition of the currency a return to the system established at the foundation of the Government is necessary. All the important theories in connection with money are discussed. It is published by H. V. & H. W. Poor, 44 Broad street, New York. The retail price is 50c.

ARMS AND CYCLES.

An advance catalogue for the season of 1898 has been issued by the Iver Johnson's Arms and Cycle Works, Fitchburg, Mass. This is a four-page list, illustrative of their automatic hammer and hammerless revolvers, the single-barrel breech-loading shot guns, and the American and Boston double-action bulldog revolvers. Their bicycles are also mentioned. All the sizes that are to be produced are given in detail.

WHAT DOLLAR WHEAT IS DOING.

The merchant among the farms "is stocking up"; the wholesale dealers are thus compelled to increase their orders; the manufacturers fill their shops with men to fill these orders; the railroads buy more cars and employ more men to move the products and the goods; the men thus employed buy more goods from the local dealers and the local producers of goods sell where they could not sell before. The last named in turn buy more goods, and the ascending scale of purchase and production begins again. This is what dollar wheat means, not only in the wheat belt, but throughout a full half of the country.



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Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
HESPELER, ONT.**

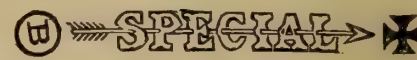


WADE & BUTCHER,
SHEFFIELD, ENGLAND.

OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

JAMES HUTTON & CO., Agents, - - Montreal

CURRENT MARKET QUOTATIONS.

TORONTO, Sept. 17, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley.	Per box.	\$5 00
I.C., usual sizes	6 25	
I.X., "	7 50	
I.X.X., "		
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	
I.X., "	4 25	
I.X.X., "	5 00	
I.X.X., "	5 75	
D.C., 12"x17	3 00	
D.X., "	3 75	
D.X.X., "	5 75	

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base...	3 15	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	8 00	
I.X., Orion	8 00	

Charcoal Tin Boiler Plates.

Cookley Grade—	Per lb.	
X.X., 14x56, 50 sheet bxs	0 05 3/4	0 06
14x60,		
14x65,		

Tinned Sheets.

72x30 up to 24 gauge	0 06	0 06
26	0 08 1/2	
28	0 07 1/4	0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	1 80	
Band	2 01	
Hoop	2 00	
Swedish	4 00	4 25
Sleigh Shoe Steel	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10 1/2	0 11
Tank Plates, 1-5 and thicker.	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1 1/2-inch	0 06 1/2	
2	0 07 1/2	
2 1/2	0 09 1/4	
3	0 11	

Steel Boiler Plate.

1/2 inch	2 45	
	2 35	

3/4 inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24	2 25	2 35
26	2 35	2 45
28	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 40	
Half polished	2 45	
All bright	2 85	

Iron Pipe.

Wrought, 1/4 to 3/4 inch, 1 1/2 c.; 1/2 inch, 2 1-5 to 2 1/4 c.; 3/4 inch, 2.65 to 2.70 c.; 1 inch, 3.60 to 3.65 c.; 1 1/4 inch, 4.85 to 4.95 c.; 1 1/2 inch, 6.20 to 6.30 c.; 2 inch, 8.35 to 8.50.		
Galvanized, 60 per cent.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
16 gauge	Per lb.	0 03 3/8
18 to 24 gauge		0 03 1/2
26		0 04 1/2
28		0 04 3/4

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" 1/4 "		4 75
" 5-16 "		4 00
" 3/8 "		3 75
" 7-16 "		3 35
" 1/2 "		3 25
" 9-16 "		2 95
" 5/8 "		2 85
" 3/4 "		2 75
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per doz. yards.	0 13	0 50
Jack chain, double, per doz. yards	0 15	
Jack chain, brass, single, per doz. yards.	0 20	10

Copper.

English B. S., ton lots	0 11 1/4	0 12
Lake Superior		
Bolt or Bar.		
Cut lengths, round, 1/2 to 3/4 in. round and square	0 20	0 22
1 to 2 inches	0 18	0 19
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.		

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes	0 15	0 16 1/2
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.		
Planished and tinned, 14x48 and 14x60	0 25	0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb.	0 17	0 19
35 to 45	0 15 1/2	0 16 1/2
50 lb. and above,	0 15	0 16
Boiler and T. K. Pitts.		
Plain Tinned, per lb	0 21	
Spun, per lb.	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12 1/2 p. c. off list.		
From 20 gauge up, 12 1/2 p. c. off list.		
Brass.		
Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c. off list.		
Acets, hard-rolled, 2x4 ft.	0 20	

Foreign, per lb	0 04 1/2	0 04 3/4
Domestic	0 03 3/4	0 04
5 cwt. casks	0 05 1/4	
Part casks	0 05 1/2	
Zinc Spelter.		
Domestic, per lb	0 03 1/2	0 03 3/4
Bar, 1 lb	0 04 1/2	0 04 3/4
Sheets, 2 1/2 lbs. sq. ft., by roll	0 04 1/2	0 04 3/4
Sheets, 3 to 6 lbs., per sq. ft., by roll	0 04	0 04 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra		
Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 30 per cent. discount.		
NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7 1/2 cents.		

Solder.

Bar half-and-half	Per lb.	Pe
Standard	0 11	0 11 1/2
Domestic, per lb	0 10 1/2	0 11
Wire	0 17	0 19
NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.		

Antimony.

Cookson's, per lb	0 09	0 09 1/2
Other makes, per lb.	0 08	0 08 1/2
Anti-Friction Metal.	Per lb.	
"Beaver" brand	\$0 20	
"Tandem" A	0 19	
B	0 16	
C	0 10 1/4	

White Lead.

Pure, Assoc. guarantee, ground in oil,	Per cwt.	
25 lb. irons	5 50	
No. 1 do	5 22 1/2	
No. 2 do	4 75	
No. 3 do	4 37	
No. 4 do	4 00	
Brandram's B. B. Genuine	7 50	
" No. 1	6 75	
I. o. b. Halifax, St. John, Montreal, Toronto	6 70	
James' genuine	6 70	
" No. 1	6 20	

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
" Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe	1 35	1 40
cwt		
Yellow Ochre (J.F.L.S.), bbls.	2 75	
per cwt		
Yellow Ochre (Royal), per	1 10	1 15
cwt		
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt.	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	
" Umber,	0 10	
do. aw	0 09	
Drop Black, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03 1/4	

Ultra marine Blue in 28-lb. boxes, per lb.	0 08	
Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04 1/2	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks		
50-100 lb. kegs.		
25-lb. Irons		
-lb. Boxes		

Sulphate of Copper.

Casks, for spraying, per lb.	0 04 1/4	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)	per gal.	
Carriage, No. 1	1 50	
Extra do.	2 50	
Body Varnish	4 50	
Furniture Varnish	0 65	
Extra do.	0 90	
Demar Varnish	1 60	
Hard Oil Finish	1 40	
Orange Shellac Varnish	2 00	
White Shellac	2 20	
Rubbing Varnish	2 50	
Polishing Varnish	2 50	

Linseed Oil.

Raw, per gal. net	0 42	
Boiled, per gal. net	0 45	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net	0 44	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 10	
Small lots	0 11	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
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Glue.

(In bbls.)		
Common	0 07 1/2	0 08
French Medal	0 10	0 10 1/2
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatine	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
AI clear		0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps. Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c. Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent. Amer.		
Central Fire Cartridges, pistol sizes, Dom.		
30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.		
Shot.		
Canadian, common, 15 per cent.		
Brass Shot Shells, 55 and 10 per cent		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags	1 00	
Best thick brown or grey felt wads, in ½ lb. bags	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge	0 60	
9 and 10 gauges	0 70	
7 and 8 gauges	0 90	
5 and 6 gauges	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge	1 15	
9 and 10 gauges	1 40	
7 and 8 gauges	1 65	
5 and 6 gauges	1 90	

Anvils.		
Per lb.	0 10	0 12½
Anvil and Vice combined, each	4 50	
Wilkinson & Co.'s Anvils, lb.	0 09	0 09½
Wilkinson & Co.'s Vices, lb.	0 09½	0 10

Augers.		
Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen	13 00	20 00
Adjustable Stearn's, each	5 50	6 50
Post-hole, Vaughan's, each	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.		
Sewing, per gross	0 65	1 59
Pegging, "	0 65	1 25
Brad, "	0 85	1 60
" handled, per gross	3 30	30
Saddler's, per gross	0 45	1 60

Awl Hafts.		
Patent Peg, oss	7 25	8 00
Sewing, per gross		

Awl and Tool Sets.		
Millar's Falls, per doz.	2 80	3 30

AXES.		
Splitting Axes	5 25	5 50
Chopping Axes—		
Black Prince	7 25	7 50
Forest Clipper	7 25	7 50
Lance	8 50	9 00
Mann's	8 00	8 25
Maple Leaf	9 50	10 00
Hand Made	7 50	7 75
Climax	8 00	8 25
Phantom	8 25	8 50

Axle Grease.		
Per gross	6 00	13 00

Bath Tubs.		
Zinc, discount	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount off revised list.		

Boxing extra		
Bells.		
Hand.		
Brass, 60 per cent.		
Nickel, 55 per cent.		

Door.		
Gon Sargent's	5 50	8
Peterboro', discount 50 per cent.		

Cow.		
American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.		
American, each	1 25	3 00

House.		
American, per lb	0 35	0 40

Bellows.		
Hand, per doz.	3 35	4 75
Moulders, per doz.	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.		
Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.		
Per doz	5 00	6 00

Bits.		
Auger.		

Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		

Car.		
Gilmour's, 47½ to 50 per cent.		

Expansive.		
Clark's, per cent.		
Excelsior, 10 per cent.		

Gimlet.		
Clark's, per doz	0 65	0 90
Diamond, Shell, per doz	1 00	1 50
Nail and Spike per gross	2 25	5 20

Blind Rollers.		
Annex, per doz	1 25	1 75
Mascott, "	1 35	1 85
Erminie, "	1 12	1 20

Blind and Bed Staples.		
sizes, per lb	0 7½	0 12

Bolts.		
Carriage, dis., 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 per cent.		
Elevator, dis., 35 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.		
Complete, with augers, each.	5 00	7 50

Braces.		
Barber's	6 00	7 75
Barber's Ratchet	10 00	11 00
Farmers	2 00	2 75
Har's Falls	15 50	29 00

Brackets.		
Shelf.		
Japanned Canadian, per doz.		
pairs	0 50	3 40
Berlin Bronze Canadian	0 85	3 20

Broilers.		
Light, dis. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, "	6 00	
Henis, No. 9, "	7 00	
Queen City	7 50	10 00

Butchers' Cleavers.		
From 8 to ch, per doz.	4 23	

Butts.		
Brass.		
Wrought Brass, dis., 17½ p.c. revised list.		
Cast Iron.		
Loose Pin, dis. 70 per cent.		

Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair	0 40	0 65

Can Openers.		
Acme, per gross	9 00	10 00
Sardine Scissors, per doz	3 75	4 50

Card.		
Horse, per do	0 60	1 00

Carpet Stretchers.		
American, per doz	1 00	50
Bullards, per doz	6 50	

Carpet Sweepers.		
Bissell, per doz	22 50	
World, "	21 75	
Daisy, "	24 00	
Star	18 00	
Crown Jewel, per doz.	29 00	
Grand Rapids, "	24 00	33 00

Cartridges.		
(See Ammunition.)		

Castors.		
Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		

Cattle Leaders.		
Nos. 31 and 32, per gross	8 50	9 50

Cement.		
Canadian, Portland	2 50	
English	2 50	
Belgium	2 35	
Canadian hydraulic	1 10	
Figures are for barrel lots.		

Chalk.		
Carpenters' Colored, per gross	0 45	0 75
White lump, per cwt	0 60	0 65
Red	0 05	0 06
Crayon, per gross	0 14	0 18

Chisels.		
Socket, Framing and Firmer.		

American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz	0 85	4 00

Churns.		
Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.		
Steel, net		3 00

Clamps.		
Judds, dis. 20 per cent.		
stearns, per doz	3 00	10 00

Clips.		
Axle dis. 65 per cent.		

Coffee Mills.		
Box	3 60	13 00
Side	3 60	4 00
Enterprise, No. 0	1 35	
" No. 2		70

Compasses, Dividers, Etc.		
American, dis. 62½ to 65 pe cent		

Cradles, Grain.		
Canadian dis. 25 per cent.		

Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.		
Torrey's Rod, per doz. (15 p.c.)	2 00	
Coil, per doz	0 88	1 60
English per doz.	2 00	4 00

Draw Knives.		
American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.		
Hand and Breast.		

Millar Falls, per doz.	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.		
Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 to 50 and 5 per cent.		

ELBOWS.		
Stovepipe.		

Per doz	75	1 70
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FAWCETS.		
Cork Lined, per doz.	0 30	0 35
Wine, per doz.	1 30	3 25
Star, "	2 80	3 90
Fenn's Corkstops, No. 2, per dozen		1 70
Petroleum, per doz.	4 50	6 50

FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 per cent. to 50 10, 5.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.		
Each	0 60	2 00

FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		

FREEZERS		
Ice Cream.		

Gem, from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.		
Henis', per doz.	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.		
Acme, dis. 65 to 67½ per cent.		

GAUGES.		
Marking, Mortise, Etc.		

Stanley's, dis. 50 to 55 per cent.		
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Wire Gauges.		
Winn's, Nos. 26 to 33, each	1 65	2 40

GLASS.		
Window.		

Box Price.		
Star.		

Double Diamond.		
Size	Per	Per
United	50 ft.	100 ft.
Inches.		
Under 25	1 30	2 50
26 to 40	1 40	2 70
41 to 50	3 00	4 50
51 to 60	3 30	5 00
61 to 70	3 60	5 50
71 to 80	4 00	6 25
81 to 85	4 50	7 25
86 to 91		8 25
91 to 95		9 25
96 to 100		10 75
101 to 105		12 25
106 to 110		14 25

GLUE POTS.		
Tinned, each	0 30	
Eoanellad each	0 55	

GRINDSTONE FIXTURES		
P. S. & W., per doz.	3 30	4 00

HAMMERS.	
Nail	
s. 5 to 10 per cent.	Can., dis
per cent.	

be, per doz	6 00
e, each	3 40

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**Improved Steam
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For attaching to Outlet of
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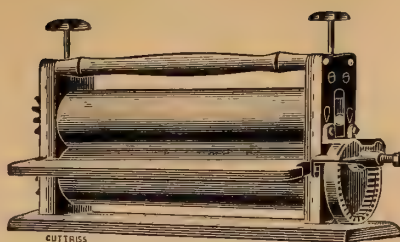
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the official copy as assented to by the Governor General,
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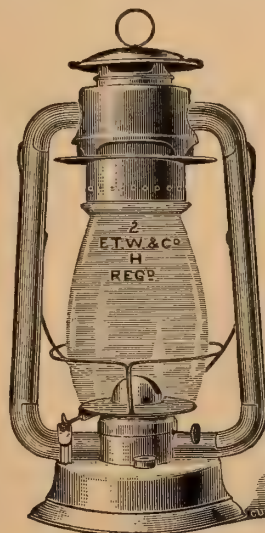
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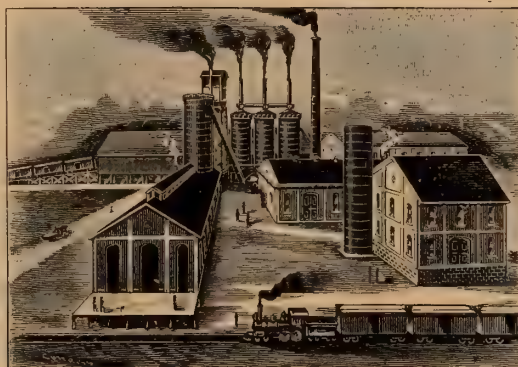
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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, SEPTEMBER 25, 1897

No. 39



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Best Anti-Friction Metal for all Machinery Bearings

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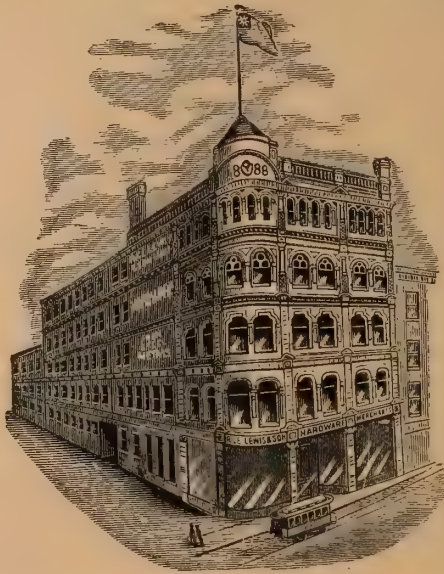
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We solicit sample orders from dealers who have not yet secured control of this handsome steel oven range. Customers who placed samples on their floors are sending in many repeat orders, and acknowledge it to be the prettiest appearing range on the market.

They are guaranteed to be perfect workers in every respect.

MAY WE SHIP YOU A SAMPLE ?

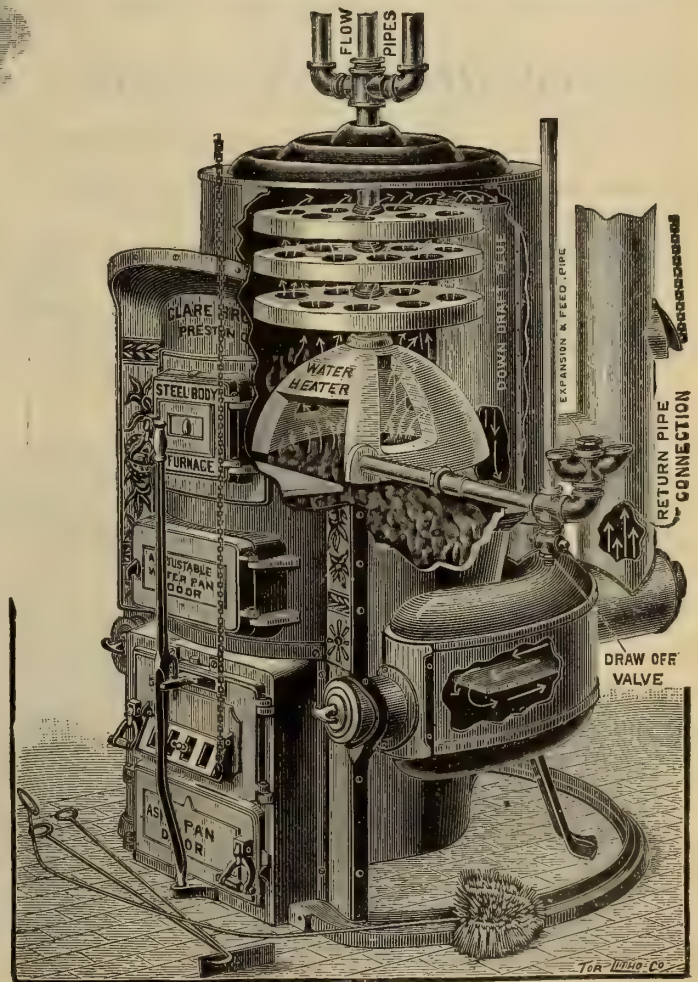
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The accompanying cut shows our "Marvel" warm air furnace with water heater fitted in dome. Live dealers find that they can very largely increase their sales by acquainting customers of the advantages of our combination system of heating. Besides, many customers have warm air furnaces who can be induced to add a few Hot Water Radiators, thereby increasing heating capacity of furnace with consequent economy of fuel.

New Hot Water Boilers and Radiators

We are supplying a complete line of our new Hot Water Boilers and Radiators. They embody many novel and superior points of construction, and are exciting much interest among dealers who have seen them. Ask us for cuts and prices.



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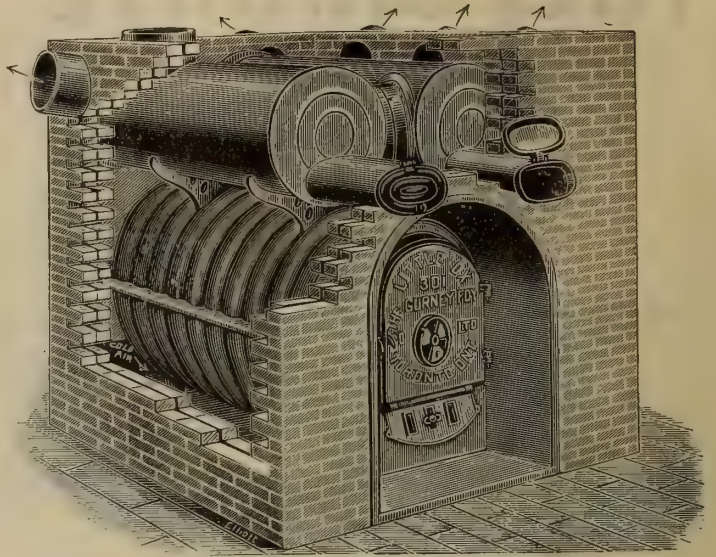
Take 3 feet rough wood.

Have extra long fire travel.

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Brick Set—with double return flue radiator.

Better write us at once for full details and prices.

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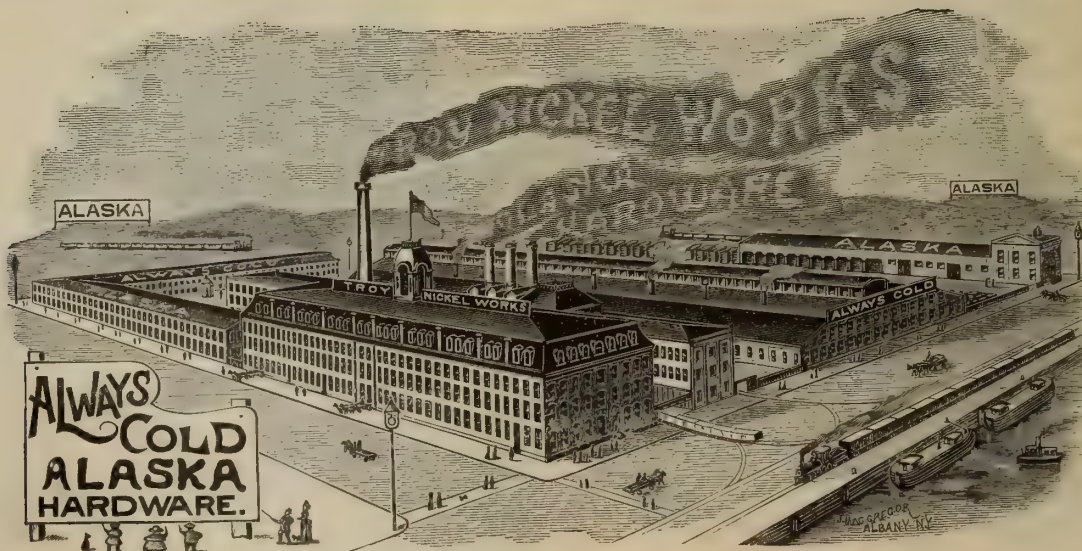
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Damper Attachments
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IT IS BUSINESS COMMON SENSE.

DURING the course of his speech in Montreal on Thursday, Sir Wilfrid Laurier made use of these words: "Tariff revolution, I will say more, tariff reform, is always more or less dangerous."

The Premier never spoke truer words; and it is to be hoped, not only that he will not forget them, but that politicians of all shades of politics will adopt them among such articles of belief as they may possess.

Whatever our political predilections may be most of us will doubtless acknowledge that in this age at least, and under the present economical conditions, a Customs tariff is necessary. We will all probably be just as ready to acknowledge that tariff reform is at times necessary.

Trade conditions are changing, and tariffs, like everything else mundane, must be made to conform to these conditions or they will become antiquated and a drag upon the commercial interests of the country.

But tariff reform should not be undertaken when it is unnecessary, or when it is merely with a view to satisfying the demands of this or that party or interest. It should only be undertaken in order to comply with

the necessities of the country. And when it is undertaken it should be characterized by efficiency and expedition.

The Canadian tariff was revised in the present year, and, at least to some extent, because the work was not properly done in 1894. But the last attempt was neither as well done nor as expeditiously done as it might have been.

The weakness of politicians, as a rule, is, we believe, more in the head than in the heart: The greater part of them try to do what is right, but they lack the business quality necessary to the performance of it.

Inefficiency on the part of tariff makers not only produces an inefficient tariff, but it causes the work of revision to occupy much more time than is necessary. This latter feature is the most prolific source of evil, for tariff revision, whether in the direction of an increase or a reduction in the duties, retards trade, and the longer trade is retarded the greater must necessarily be the injury wrought to the commercial interests of the country. Canada has yet to be as great a transgressor in this respect as the United States, but that she is a transgressor is known to all men.

As we have said before: tariffs we must have. So must we have tariff revisions. But there should only be tariff revisions when public exigencies demand them. And then the work should be performed as expeditiously and efficiently as possible.

How to secure the desideratum is a question which has received attention time and again in **HARDWARE AND METAL**. We have contended, and still contend, that the framing of a tariff can only be done in any way approaching proficiency by an inde-

pendent commission, composed of business men, agriculturists, etc., nominated by the boards of trade and other organizations.

The tariff cannot be taken out of politics for the reason that it cannot be taken out of the House of Commons. But a tariff framed by an independent commission and then submitted to Parliament for approval would (1) be a conformation to the business interests of the country and not to the political exigencies of any one party, and (2) few politicians would dare to attempt to do anything which would at least vitally change its provisions.

This is the gospel of business common sense, and it is to be hoped that the business men of the country will, in the future, be more aggressive in spreading it than they have in the past.

TURPENTINE AND LINSEED FIRM.

Turpentine and linseed are interesting products at the moment. The first named continues to gather strength at sources of supply, and the advance from the lowest point now amounts to 5c. per wine gallon.

Naturally, in view of this rise, current market quotations have been advanced, being 1c. higher than they were, and firm at the rise.

There has been no change in linseed oil. English quotations are somewhat easier, but domestic oil represents a greater factor in fixing our Canadian prices than in former years.

The proportion of imported oil is yearly becoming less, and there is every prospect of our being independent ere long of imported linseed oil.

NOT ABSOLUTELY NECESSARY, BUT--

A TRADE paper is not absolutely necessary to the guidance of a hardwareman, any more than a compass is absolutely necessary to a mariner who desires to cross the Atlantic.

The office of the trade paper is to register the temperature of the markets and record all news of interest or of value to the particular line of business in whose interests it is published. To these things it is called and to these things it sets itself to perform.

The daily paper cannot—or at any rate it does not—cover this ground. Its forte is general news and politics.

The trade paper, on the other hand, is a specialist. It studies one particular thing. And that is the commercial world.

It is obvious then that if the trade journal devoted to a particular branch of business is conducted with any degree of efficiency merchants engaged in this particular line cannot afford to be without it.

They can rely on hearsay for information regarding the markets, methods of doing business, etc., but it is possible that the information may come through a prejudiced channel. And one thing is certain, they can only in this way get an infinitesimal part of the whole.

If gossip or letter had been efficient news disseminators the newspapers of to-day might not have had a being. An invention is usually the outcome of a need.

HARDWARE AND METAL has been induced to make these remarks by an incident drawn to its attention recently. There is in Toronto a large retail hardware firm which has repeatedly refused to become a subscriber to HARDWARE AND METAL. It relied for its information as to markets, etc., upon one of the heads of a certain wholesale house, who telephoned him weekly. That was all the firm wanted. A trade paper it had no need of.

More than two months ago an advance of from 15 to 20 per cent. took place in a certain staple article of hardware. This firm's market mentor forgot to notify it of the change, and it, therefore, continued to sell the article at the old figures. It discovered the loss it had thus incurred when

it had to buy. And then there was weeping and gnashing of teeth.

"Why did you not telephone us of the change," indignantly remarked one of the partners to the aforesaid market mentor.

"My dear sir, I cannot begin to remember everything; I told you I would do the best I could," was the rejoinder. "But, say," he added, "do you not take HARDWARE AND METAL?"

"No."

"You don't? Well, then, you ought to be ashamed of yourself. HARDWARE AND METAL had an article in about the change several weeks ago. Why, my dear fellow, you should not be without that paper. It records all the changes, and is right up to date."

"Is that so? Say, if you see a representative of HARDWARE AND METAL you had better send him down."

Thus was a firm made to feel its need of a trade paper after having lost on one article alone, through ignorance of the condition of the market, enough money to pay for several years' subscription. And what it hitherto lost on other lines no one will ever know.

Although HARDWARE AND METAL is so generally subscribed to by the retail trade of the Dominion, yet there is a firm here and there who, like the one cited, does not take it. We have one such now in mind which supplied a certain article to a wholesale house that wanted it to complete an order.

"There," remarked a member of the wholesale house to a representative of HARDWARE AND METAL, "we have bought that thing a great deal cheaper than we could have from the manufacturer. It evidently does not know that the price advanced several weeks ago."

This change, too, it might be mentioned, was recorded in HARDWARE AND METAL.

A mariner can navigate by the pole star; but it is better for him to have a compass. A merchant can get along without his trade paper, but it is better for him to have it.

ADVANCE IN GALVANIZED IRON.

An advance of about 20 to 25c. per 100 pounds has taken place in galvanized iron of United States manufacture.

Jobbers in Toronto now quote as follows: Case lots, 28 gauge, \$3.80; 26, \$3.55; 22 to 24, \$3.30; 18 to 20, \$3.05. In smaller lots 25c. extra per 100 lbs. will be charged.

BARB WIRE AND ITS FUTURE.

ALTHOUGH it is yet three months before barb wire will go upon the free list, those holding stocks in Canada have evinced a strong desire within the past week or so to dispose of the same.

The ruling price for some time has been \$2.20, but within the last week or two \$2.15 has been freely quoted.

The outlook for the manufacturers of barb wire in Canada after January 1 next is poor. Taking barb wire at the price it is to-day in Pittsburg it could, after the article is placed on the free list, be imported into Canada at about \$1.83 to \$1.88.

With two freights to pay—one on the raw material and another on the finished product—and no tariff protection, it is evident the Canadian manufacturers will find it difficult to meet these figures.

LARGE CEMENT SALES.

Western buyers have again been large operators this week in Belgian cement at Montreal. Sales on this account amount to 8,000 casks, the price being \$1.85. Of this quantity 2,000 will be delivered this season and the balance next year.

Another lot of 1,200 casks Belgian and another of 1,000 was sold at \$1.85 this week for prompt delivery. This makes 10,000 odd casks in all in the past eight days.

There is no demand at all for English in Montreal at present, and the imports of it this season have been only 22,000 casks, against 88,000 Belgian. When the preferential clause comes into force the result will no doubt be different.

SHARP ADVANCE IN POT ASHES.

There is a strong possibility of a shortage in pot ashes this fall. Receipts at Montreal have been exceptionally light lately, and as demand has been keen prices have advanced 40c. per barrel.

This rise has taken place inside of six days, and three large operators in Montreal have their buyers out gathering in all they can get their hands on. In fact, one firm practically controls all the stock on the market. Neither this firm nor the others will quote a price at present, as they are firm believers in still higher prices.

For first pots values are firm at \$3.50, and, as no seconds or pearls are offering at all, values on them cannot be quoted.

SLAUGHTERING WIRE NAILS.

COMPETITION among the wire nail manufacturers in Toronto and other points in western Ontario has developed so much during the past few weeks as to materially affect values.

Up to the middle of the present week some jobbers in Toronto were trying to get \$2.04 for ordinary lots, but it failed to bring them any business.

Now \$1.95 to \$2, with a rebate of ten cents per keg, is being freely quoted f.o.b. Toronto, bringing the actual price down to \$1.85 to \$1.90, while sales have been made at outside points at figures which are even better than these, taking freights into consideration.

The trouble seems to largely arise from the fact that there are too many manufacturers of wire nails in the west. In all there are eight factories, there being two in Toronto, three in Hamilton, one in London and one each in Brantford and Alliston.

Shortly after the tariff was changed the Canadian manufacturers based their price on Pittsburg figures, but the Pittsburg quotations are now thrown to the winds.

Here is an evidence of it: In Pittsburg to-day the ruling price for wire nails, in less than carload lots, is \$1.45 f.o.b. To this add duty 60c. and freight 21c., and we have \$2.26 as the laid down price of wire nails from Pittsburg to Ontario points between Toronto and Sarnia and south of the main line of the Grand Trunk Railway, or 36c. per keg above the figures now ruling in Toronto, Hamilton and London.

This should be a good time for the retailer to buy wire nails.

LOW HANDLE-BARS KNOCKED OUT.

We notice the Washington District Commissioners have, in revising the police regulations regarding bicycles, dealt a blow to the obnoxious low handle-bars and humpbacked scorchers. They have made a rule that all riders shall ride with their heads up.

Public sentiment and the good sense of individual riders have paved the way for the commissioners' action. An inspection of over two hundred bicycles stacked in the basement of the Treasury Department disclosed only six remnants of the ram's horn handle-bar era. The rest had the handle-bars even with or above the line of the saddle.

A NEW INDUSTRY FOR CANADA.

M R. W. M. ENGLISH, of the R. W. English Refining Co., was in Montreal this week. The purpose of his visit there is to erect for his company a full and complete refinery for the purpose of refining linseed oils by their process, the product of which is used extensively in the manufacture of paint and varnish in Canada. He claims that 84 per cent. of the total cost of imported English and 75 per cent. of American oils consumed in this country is sent out of the country, which amount is gradually on the increase, with the growth of the consumption at home and our commercial relations abroad. This company have refineries at Buffalo, N.Y.; Chicago, Ill.; London, Eng., and the erection of this one in Montreal will place the Canadian manufacturer on an equal footing.

NO FREE TIRE REPAIRS IN 1898.

At a meeting of American tire manufacturers, held behind closed doors in New York last Friday, it was decided to make no reduction in the price of tires in 1898. The guarantee was allowed to stand at the calendar year, and the conclusion to do away with the free repair shops after January 1 next was arrived at.



Iver Johnson Revolvers Iver Johnson Cycles . .

*Send for our Catalogues and Prices
They will interest you*

Honest Goods
at
Honest Prices

**IVER JOHNSON'S ARMS AND
CYCLE WORKS**

Fitchburg, Mass., U.S.A.



VALUE OF COMMERCIAL PAPER AS QUICK ASSETS.

By WILLIAM H. PECK SCRANTON PA.

COMMERCIAL paper may be defined as notes given in mercantile transactions, or to raise money to be used in such transactions, and in either case to be paid when due without request for renewal. The term is one that would be differently understood in various regions. In our own city (Scranton) we would be asked if it were the same as business paper. In the northwest we would be told that elevator and wheat paper are the best, such being made for the purpose of buying wheat and storing it in elevators.

In the cotton belt, commercial paper would be considered by many to be notes given for the preparation or marketing of the cotton crop. In Kentucky notes are considered by some to be desirable when secured by warehouse certificates for barreled liquids, and some of my bank friends have assured me that the collateral becomes more valuable as the notes gain age. The most desirable commercial paper is such as is given with well-founded reason of ability to turn the money into channels of business and then out again, by the time the notes become due.

It is reasonable to believe that a bank cannot very creditably pass through such times as we have had in recent years if it loans all its capital, surplus and deposits, excepting the amount required for reserve, to parties who expect to use the money as permanent capital, and hence will desire to renew the notes. As a bank's deposits are expected to be payable on demand, it is quite desirable that it have some form of

QUICK ASSETS

as part of its investments, by which it can at times raise money without disturbing the loans to its customers.

We all still have in mind the bank panic of 1893 and the ante-election stringency of last year. The banks that could reinforce their reserves without calling in their home loans passed through those times with the least anxiety; and it pays to be well prepared for such occasions, even though the preparation be not called into use more than once in ten or a dozen years. It is to be assumed that all bankers desire to have a large portion of their assets upon which they can quickly realize, even though the income from them may be less than that received from more permanent investments. For that purpose some invest in mortgages on local real estate; others buy municipal bonds; others lay away gilt-edge bonds that are listed on the exchanges of the great cities; and still others buy commercial paper. Of these four forms of investment, local mortgages pay the highest

income, and yet would not be legal investments for all the members of this group. But can they be depended on as quick assets in time of panic? Would not the local situation be made worse by insisting at such a time on the payment of any that might be due?

Municipal bonds would scarcely find a market in time of panic, but would have to be peddled out.

Listed bonds, which are almost entirely of railroads, and are supposed to be quoted daily on the exchanges, run down to a very narrow market in time of panic, and to prices that are sometimes ten or fifteen or more points off from their usual quotations. In 1893 there were times when the total daily bond sales at the New York Stock Exchange only amounted to \$300,000, and that is a very small amount of daily sales when we consider that there are upwards of \$188,000,000 of investment bonds held by National banks alone, any of which are liable to be thrown on the market at such a time, in addition to the holdings of State banks and alarmed individuals.

I know of an institution that for some years has kept a large amount of its funds invested in commercial paper so as to have quick assets, and on May 1, 1893, stopped buying because its management saw indications of stringency, and at that time had in its pocket-book \$640,000 of such paper, as well as \$1,000,000 of its customers' notes. The result was that in a short time, on account of the payment of its purchased notes as they fell due, its reserve was run largely above the legal requirement; and although that panic is said to have been the most severe in the history of banking in the United States, still that institution was able to announce that its customers need not pay any loans, but, on the contrary, could have additional ones where their responsibility would warrant and the value of their accounts would entitle, and that any townsmen who were customers of other banks, but who were fortunate enough to have loans with it, could renew without question. This it could not have done if it had been depending on local mortgages, municipal bonds, or listed bonds.

In time of stringency a bank's commercial deposits are quite certain to decline, because business men cannot make collections, and must use their balances to meet maturing obligations. For a bank to be able at such times to be of service to the community in which it is located is no small matter, and I claim that

CAREFULLY SELECTED NOTES

most readily furnish such means. You may ask if the institution referred to lost any money in 1893 by such a policy, and, in reply, I would say that in March, 1894, it

had no past due notes and had not lost a dollar since December, 1892; and in the last four years has loaned in all ways \$22,000,000, with losses of only \$2,250. Could a better record be shown at such a time with any other form of investment of equal amount?

There are numerous sources from which commercial paper can be obtained, but in buying, it is well to select the brokers as carefully as one would select the notes. Some brokers will offer all kinds of notes—good, bad and indifferent—not seeming to use judgment themselves in getting together their assortment, and to select from such a lot requires time and is tiresome. It reminds one of the man who had a quantity of apples in his cellar that required sorting because some were specked and many were rotten. He said afterwards that he did not like the job because it was too great a strain on the judgment.

Some brokers will offer to endorse the paper they have for sale, without appearing to know that if they do much business their contingent liabilities from such a source will be enormous, and must make their endorsement of little value. Other brokers will have a cleaner lot of paper from which one can more easily make selections.

In any event it must be understood with one's brokers that the quality is the first consideration, and that being decided on, the rate and the time of maturity comes next. But the rate should never be allowed to be the first influence in making the selections.

Many times the rate will be lower than that charged by a bank to its customers, and occasionally it will be higher; still a customer paying the regular rate has the advantage over him who may place his notes at the lower rate, for, by virtue of his account, he has reason to expect his bank to carry his loans as long as he requires, while the maker of commercial paper has to pay his notes when due, and cannot ask for renewal no matter whether times are good or bad.

So far as a low rate may be concerned, I see no more objection to low-rate paper than to low rate bonds. The difference of per cent. is

IN FAVOR OF THE PAPER

for it will average higher, and this difference will be still greater in the future. For are

not the really desirable bonds rapidly getting on a 3½ per cent. basis, as is evidenced by recent funding operations of the Lake Shore, the New York Central and the Northwestern railroads, and as will be shown soon by the Delaware, Lackawanna and Western in funding maturing 7's?

Every bank that invests its surplus funds

in commercial paper should have a credit department connected with the institution. Just how much time should be given to such a department will depend on the amount invested. It may commence in a small way, as one did with a little memorandum book labeled "Credit Impressions;" then it can be added to by getting mercantile agency reports, and yearly statements of resources and liabilities and other information as it becomes accessible. By keeping envelopes properly labeled and all records filed away in them, they will be at hand when desired for use.

Questions are sometimes asked as to the means of ascertaining the correctness of annual statements issued by parties who sell their paper, and the assertion is occasionally made that they are not as reliable as the statements published annually by railroads. We must cease to do business unless we are willing to believe that the

GREAT MAJORITY OF PEOPLE ARE HONEST and truthful, and by closely analyzing a debit and credit mercantile statement, and considering with it all the information one can obtain, a very safe calculation can be made as to the desirability of taking what may appear to be a legitimate risk. We are favored in our region by having railroads that are under most excellent management, but the same cannot be said of all railroads; and when a road that has stood as did the Atchison, Topeka and Santa Fe can carry on its statement as assets over \$2,000,000 of rebates, and such a state of things not be known, it is evident that the commercial statements compare well with the average railroad statement. Attention might also be called to the Baltimore and Ohio Railroad Co.'s affairs, in regard to which Expert Accountant Little is said to have reported that in four years ending June, 1895, they had paid over \$5,000,000 in unearned dividends, and had largely overstated their profits, and had a floating debt of many millions, all of which was not previously known. Also the Canadian Pacific Railroad might be mentioned, which carried on its statements a large amount of assets to be used in keeping up dividends, when a period of business depression might reduce its earnings. When such a time came a short time ago, it was found that these assets had otherwise been used, and could not be of service, and dividends were suspended.

It seems to me to be more legitimate banking for a commercial institution to have its funds invested in notes representing the buying and selling of merchandise, or its productions, than to invest in obligations which represent permanent investment on the part of the borrower, and which the majority of corporations issuing never expect to pay, except with new ones.

BE FIRST

Don't be satisfied with your business until you occupy first place—the very first.

In every town and city there is one firm in each line of business that stands first—at the top.

It should be your aim and determination to fill that place. There is no other thing that will prosper your business so much as a reputation for the first store in town. It's a great advantage. The great majority like to deal at the leading store. Its human nature to pay homage to success—"Nothing succeeds like success" is a true saying. You can occupy first place in your trade for paints by handling

THE SHERWIN-WILLIAMS PAINTS.

They stand first—the very first—in the paint trade of the world. First in quality and first in sale. To handle them is a step in the right direction.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

The question constantly before bankers is: How can the institutions of which we have charge be so conducted as to earn dividends for stockholders, roll up a surplus for their protection and the protection of depositors, and at the same time be prepared when panics come, as come they will, so that their banks shall be "as an hiding place from the wind and a covert from the tempest; as rivers of water in a dry place, as the shadow of a great rock in a weary land?" If I have helped to the solution of the question I shall be gratified.

AN INVENTOR'S REWARD.

A young man employed at \$1.80 a day in one of the factories in New Britain, Conn., recently invented an attachment to a machine on which he was working which promises to be of great value. Four men were employed on this machine prior to his invention, and its use was about to be abandoned because of the expense attending the running of it. The young man devised an attachment, which when applied to the machine, permitted one boy to attend it, and he can turn out as much work as the four men could previously. This machine is run regularly every day, and it is doing good work at a saving of \$6 a day over

former cost. The president of the company gave the young man a cheque for \$25.—Springfield (Mass.) Republican.

HE WILL NOW RISE EARLY.

Philip D. Armour is in his office by 6.30 every morning. He leaves his car and walks down Adams Street to the Home Insurance building just as the sun's first kiss of the day lights upon the tall buildings. His gait is steady and elastic, and he looks as if he had enjoyed a hearty meal.

As he was passing the Lansing Hotel one day, a porter who was washing the sidewalk stepped politely out of his way and begged pardon for the water that lay in puddles through which he must walk. He did not know whom he was addressing.

The gentleman reached in his pocket in a hasty sort of way, and among a lot of loose silver drew forth two half dollars, which he handed to the porter and passed on. As he did so I asked the servant if he knew the donor's name. He did not. When I told him he was the richest man in Chicago he seemed astounded.

"An' you say he passes 'long dis'er way every day 'bout dis time? Well, sah, you sho' gwine fin' me washin' dis her' sidewalk reg'lar after dis mitey early in de mawnings."—Chicago Times-Herald.

BOYS WITH NO CHANCE.

THE famous English artist, Martin, went to the baker's with his last shilling, to buy a loaf of bread. The baker snatched the loaf from his hands and told him the shilling was counterfeit. Martin returned to his home, and finding a dry crust in his trunk, went about his work with that determination which knows no defeat.

A poor colored woman in a log cabin in the South had three boys, but could afford only one pair of trousers for the three. She was so anxious to give them an education that she sent them to school by turns. The teacher, a Northern girl, noticed that each boy came to school only one day out of three, and that all wore the same pantaloons. The poor mother educated her boys as best she could. One became a professor in a Southern college, another a physician, and the third a clergyman. What a lesson for boys who plead "no chance" as an excuse for wasted lives!

"I want a Greek Testament," said John Brown, of Carpow, Scotland, to a bookseller at St. Andrew's. The dealer stared at the shepherd boy, rough and unkempt from a night walk of twenty miles to buy a book, and had begun to make sport of so strange a request from a small country lad, when a college professor entered. "Now," said the professor, after learning what John wanted, "If you will read a verse of that Testament and translate it to me, you shall have the book for nothing." The boy translated several verses with ease, and marched proudly home with his prize. He had mastered both Greek and Latin while tending his flock, and laid the foundation for the ripe scholarship for which he became noted.

Sam Cunard, the whittling Scotch lad of Glasgow, wrought out many odd inventions with brain and jack-knife, but they brought neither honor nor profit until he was consulted by Burns & McIvor, who wished to increase their facilities for carrying foreign mails. The model of a steamship which Sam whittled out for them was carefully copied for the first vessel of the great Cunard Line, and became the standard type for all the magnificent ships since constructed by the firm. When Samuel Cunard was knighted, he did not forget that he owed his honors and his wealth to conscientious whittling.

Lord Eldon might well have pleaded "no chance" when he was a boy, for he was too poor to go to school or even to buy books. But no; he had grit and determination, and was bound to make his way in the world. He rose at four o'clock in the morning and copied law books which he borrowed, "Coke upon Littleton" among others. He was so eager to study that

sometimes he would keep it up until his brain refused to work, when he would tie a wet towel about his head, to enable him to keep awake and to study. His first year's practice brought him but nine shillings, yet he was bound not to give up. The Master of Rolls once decided a law point against him; but on his appeal the House of Lords reversed the decision. When Eldon was leaving the chamber, the solicitor tapped him on the shoulder and said: "Young man, your bread and butter's cut for life." The boy with "no chance" became Lord Chancellor of England, and one of the greatest lawyers of his age.

Stephen Girard had "no chance." He left his home in France when ten years old, and came to America as a cabin boy. His great ambition was to get on and to succeed at any cost. There was no work, however hard and disagreeable, that he would not undertake. Midas like, he turned to gold everything he touched, and became one of the wealthiest merchants of Philadelphia. His abnormal love of money cannot be commended, but his thoroughness in all he did, his public spirit at times of national need, and willingness to risk his life to save strangers sick with the deadly yellow fever, are traits of character well worthy of imitation.—Pushing to the Front.

SPONGES FOR EUROPE.

Despatch from Washington under date of September 21 says:

"Mr. Frank H. Hayfield, of Key West, was in the city recently. He said: 'Florida, for the first time in her history, is now shipping sponges to Europe, and the shippers are receiving good returns for all that reach the London markets. The variety of sponges chiefly demanded is the grass sponge. Good grass sponges bring on an average of from 40 to 60 cents a bunch. The sponge industry has long been an important one in Florida. For many years the principal dredging has been in progress at Bailey's Point. Now, however, the black crews of the sponging vessels have begun to remove their kraals to Anclote Key. Several reasons are given for the change in place of operations, the most important of which is the fact that the water around Bailey's Point was being used too rapidly on account of the large number of sponging men there. There are many kraals at Sea Horse Key also, but they are used only in winter, when the sponges take a long southern trip. A Mr. Decker, one of the prominent sponge men of the state, recently shipped in one day nineteen bales of sponges that, according to the prevailing prices, were valued at \$7,000. With good crops of fruit and splendid sponge finds, prosperity surely should pay us a visit down our way.'"

A MODERN WAREHOUSE.

IT is usually supposed that iron and other hardware material do not lend themselves readily to neatness. This conception is due to the helter-skelter appearance of most yards where such stock is stored. That it is a false one a visit to the metal warehouse of Caverhill, Learmont & Co., Montreal, clearly demonstrates. This warehouse was acquired by its present owners after the recent fire. It has been rebuilt and remodelled in solid masonry into an ideal site for the storage of heavy goods. Having a depth of 300 feet from Colborne to Ann street, and a frontage on both of 90 feet, there is naturally ample accommodation for a very extensive stock. The main entrance is on Colborne street, Nos. 12, 14 and 16 being on this street, while the frontage on the Ann streetside comprises Nos. 44, 46 and 48. Entering from Colborne street are two large offices, one the private office of Mr. Caverhill, and the other the public office for the staff of clerks employed in this department of the firm's business.

It is the ground floor, however, that will forcibly strike the eye of anyone conversant with the handling of heavy goods, for the fact will be recognized at a glance that this is just the spot for expedition in the receipt and despatch of bulky material. A broad drive runs through the middle of the warehouse from Colborne to Ann street. Altogether there is ample room for loading and unloading a score of wagons at the same time.

Another striking advantage is that the stock is entirely sheltered from the weather. This is not the case in the majority of iron yards. It usually happens also that an iron warehouse is a dark, gloomy place; it is not so in this case, for a number of large skylights give plenty of light all over the building. On the Colborne street front there are, in addition to the ground floor, two large flats which will be used for the storage of such goods as agricultural implements, tools, etc. A large hoist runs to both these flats. In the rear there is only one flat in addition to the ground floor, which is also reached by a hoist, but it is an exceptionally large one, as the first lot of a stock of 10,000 boxes of window glass were being placed in it at the time of the writer's visit.

Being situated on the banks of the canal, goods can be shipped from the warehouse by water with promptitude. For rail shipment, there is a branch track of the Grand Trunk to the rear entrance for use in the case of carload shipments. Telephones connect the warehouse with the city offices of the firm on St. Peter street, as also the public system, and altogether the establishment is most completely equipped in every particular for the expeditious transaction of business.

H. S. HOWLAND, SONS & CO.

WHOLESALE
HARDWARE 37 Front St. West ...Toronto

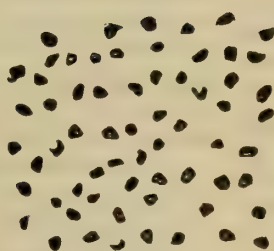
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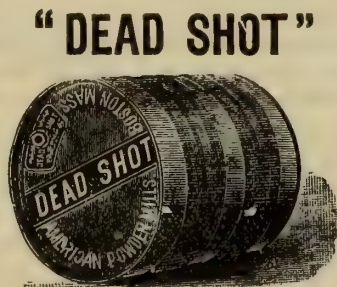
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UNSURPASSED BY SIMILAR GRADES OF
ANY MANUFACTURE.

STRONG,
UNIFORM,
CLEAN.



Dead Shot, FG.



"DEAD SHOT"



Dead Shot, FFG.

A most remarkably and universally popular Brand for general *FIELD* and *TRAP* shooting. Has for thirty years steadily grown in favor in the United States. **STRONG, UNIFORM**, can be **USED ALL DAY** without cleaning the gun: being a **MOIST BURNING** Powder, it is, for every day use, the sportsman's favorite. **DEAD SHOT** is packed in air-tight metal packages, each containing twenty-five pounds.

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DEAD SHOT. Best Black Powder, Field or Trap Shooting.

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37 West Front Street ... TORONTO

We Ship
Promptly

Graham Cut and Wire Nails are the Best.

Our Prices
Are Right

THE CYCLE GUARANTEE PROBLEM.

THE changes in the conditions governing the cycle trade make our manufacturers feel more severely than ever the weight of their "old man of the sea," the guarantee. It has all along been a load grievous to be borne, and some indeed have succumbed under it. Speaking seriously, it looks as if it is in order for the weight carriers to brush the old fellow off their backs, for as lead before, he is assuming the attributes of platinum. The bicycle manufacturing industry is getting down to a rock-bottom basis, and should, therefore, be operated upon strictly business principles. When taking this into consideration the guarantee, as at present interpreted, must be cut off, it being anything but a business proposition.

The guarantee has worked itself out unfairly to both maker and purchaser. Like every other good thing, it has been abused; the maker has found himself victimized upon every specious or preposterous claim and there has been nothing for him to do but to look pleasant, though knowing all the while that his year's "profit and loss" account was on this score being depreciated by an amount aggregating several good dollars upon every good wheel turned out in his factory. Were, on the other hand, this drain upon the makers' resources to be abated, the purchaser would receive the benefit, for the former would then be in a position to enhance the value of his product to the extent of the moneys which he now disburses for a "dead horse."

This problem is a difficult one to handle, and as the present is the time when the makers are formulating their plans for next season, the Canadian Cycle Manufacturers' Association could not do better than decide without delay upon a line of action. We might offer as a suggestion that the guarantee upon high grade machines be reduced to three months, and that no guarantee whatever be given upon the cheap grades. This step would tend to lead the public to exercise greater discernment in their purchases, and it might be expected to throw the business more into the hands of makers of established reputation.—Cycling.

OPINIONS ABOUT CHAINLESS WHEELS.

The manufacturers who are looking for an expression of public opinion in regard to chainless bicycles before they make up their minds to go into or stay out of the manufacture of this special line of product may have to wait for a long time. Neither the private information which they receive from agents or correspondents nor the newspaper comments which reach them may be considered as safe guides to the desired know-

ledge, for an impartial survey of newspaper comment gathered from the length and breadth of the land shows opinions about equally divided for and against, and withal unformed as properly they should be so long as the people have had no practical experience with chainless bicycles to guard them safe from erroneous and hasty ideas.

Ranging from the off-hand pronouncement that the manufacturer who does not make a chainless bicycle will not be "in it" to a sweeping condemnation based on a slightly increased friction in bevel gears (which after all is nearly irrelevant), newspapers and correspondents go on talking, but whether they have had their hands on the purchasing public's pocket-book and know how its mind, collectively speaking, will be affected when the real chainless article is placed before them, seems more than doubtful. Intrinsic merit judged by an experienced bicycle builder is a safer index for the perplexed manufacturer to follow than the howl of the press whether lifted in approval or verification.—Cycling Life.

BICYCLE CHAT.

A company with a capital of twenty thousand pounds, issued in four hundred shares of fifty pounds each, has been formed in Frankfort, Germany, in order to manufacture chainless cycles on a new principle and with a changeable gear. The inventor is a local man named Frank.—Referee.

The record for the mile, flying start, now stands at the wonderful time of 1.37 3-5. J. Platt Betts, an Englishman, holds this record.

"An invitation to accidents" is the latest refined definition given to the shoddy wheels sold by department stores.

A ball-bearing chain, containing over 1,000 one-eighth inch balls, has been made by an English machinist.

A NEW BICYCLE TIRE.

J. H. Beamer, of Brampton, has secured the Canadian patent for the latest and best invention, the punctureless bicycle tire. This tire is made from the finest steel, woven in a unique manner. There is no rubber whatever about it, and is made to fit any pneumatic bicycle or sulky wheel at present in use. The tire has all the resiliency of the present pneumatic, and is impervious to puncture. For that matter there is no air in the tire, and if it were full of holes the rider would not be inconvenienced in any way. Many riders are clamoring for this tire already, but the patentee has not yet decided how he will place his invention. He has applied for United States patents, and has received much encouragement from the best bicycle manufacturers in America.

A POWERFUL RIFLE.

The annual fortnight's meeting of the National Rifle Association, at Bisley, which closed recently was remarkable in demonstrating the wonderful accuracy of the Lee-Metford magazine rifle, and its immense superiority in this respect over any weapon similarly tested hitherto, says an exchange. This is the first year that the Lee-Metford rifle has been used at Bisley, it replacing the Martini rifle. Of the thousands of volunteers, regulars and colonial troops taking part in the various competitions, hundreds have broken all records. It is no exaggeration to say that bull's eyes have become tediously monotonous. In several competitions, twenty or more men shooting at the 500 and 600 yard ranges made the highest possible scores. In the final shooting, the ties were quite tiresome, owing to the competitors repeating the feat. But for accidents of wind and light it would have been impossible to have decided who were the winners of some of the prizes. In these same events dozens of marksmen were within one or two points of the highest scores made. An instance of excellent scoring was seen in the competition for the Queen's Prize, the chief event of the meeting, which is divided into three stages, carrying, besides the money prize, the association's bronze, silver and gold medals, the bronze medal going to the winner of the first stage the silver medal to the winner of the second stage and the gold medal to the winner of the third stage. The winner of the silver medal was given a score of 219 points. The winner in 1896 scored only 196. While the scores of 188 last year got into the eliminated hundred, who competed for the gold medal, none of the marksmen among the hundred this year scored below 206.

A FENCE-JUMPING BICYCLE.

In the window of the Mountain City Cycle Co., 2361 St. Catherine street, Montreal, can be seen the tandem on which Drury and Robertson went over the fence at the late M. A. A. A. races. How the men escaped is miraculous, and the frame has not a joint started in it nor the wheels damaged in any way.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLES, Man. Dir.
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Canadian Rubber Company

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Montreal
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Capital, \$2,000,000
.. Manufacturers of the ..

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
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Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

BOWMAN, KENNEDY & CO.

Wholesale Hardware Merchants

... **LONDON, ONT.**

Dealers and Importers of

Linseed Oil
Spades and Shovels
Harvest Tools
Window Glass
Cut Nails
Wire Nails Binder Twine
Cordage Chain
White Lead
Building Paper
Galvanized Iron

Also full lines of Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives

QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

NO DISCRIMINATION.

United States Attorney-General McKenna on Tuesday announced his opinion in the matter of Section 22 of the new tariff law. He holds in effect that goods coming directly into the United States from foreign countries through Canadian ports are not subject to the discriminating duty of 10 per cent. He also holds that foreign goods shipped from countries other than British possessions in British vessels are not subject to the discriminating duty.

The decision of the Attorney-General will do much to soften the feelings of Canadians towards the United States. The discriminating clause was inserted in the Tariff Bill surreptitiously. It could not be done otherwise. And Congress, in its haste to adjourn, did not notice it.

It was a conspiracy mean and contemptible, and the United States, to its honor, has nipped it in the bud.

SURPASS IT.

If your seat is hard to sit upon, stand up, says The Industrial World. If a rock rises before you, roll it away or climb over it. If you wish for confidence prove yourself worthy of it. It takes longer to skin an elephant than a mouse, but the skin is worth something. Don't be content with

doing what another has done—surpass it. Deserve success and it will come. The boy was not born a man. The sun does not rise like a rocket or go down like a bullet fired from a gun; slowly but surely it makes its round, and never tires. It is as easy to be a leader as a wheel-horse; if the job be long, the pay will be greater; if the task be hard, the more competent you must be to do it.

HEAVY SHIPMENTS OF IRON ORE.

Iron ore shipments from the Michigan mines for the month of August were the largest on record for any equal period in any year past, and the total volume of shipments to date are in excess of the quantity forwarded in the same length of time in any previous year.

Ore freights are steadily climbing up, and it is feared that a number of firms will not be able to secure all the old-range Bessemer ore that they need.

There is every indication that supplies of ore will be cleared up pretty well before the opening of navigation next spring, a condition which would materially assist the miners in securing better prices next year.

BELGIAN PIG IRON PRODUCTION.

There has so far this year been a large increase in both the native production and

the importation of pig iron in Belgium. The output of Belgian blast furnaces during the six months ending with June last, as compared with the first half of 1896, is given in the following table. It will be seen that while the output of foundry pig shows a slight decline, that of forge and steel pig, especially the latter, is rapidly increasing.

	First six months.	
	1897. Tons.	1896. Tons.
Steel pig	303,720	219,705
Forge pig	205,890	157,775
Foundry pig	41,630	46,220
Total	591,240	423,800

POWER OF CONFIDENCE.

The secret of many a business success lies in the little word "confidence." The patient who has faith in his doctor's remedies is already under way to recovery; the merchant who believes in himself, not from blindness or egotism, but from a happy-hearted, jolly-spirited, sunny-natured belief that "whatever is right" will succeed, where a man of moods and shadows will fail with the same opportunities.

As the saying is, "confidence begets confidence." Do not approach a customer with a suggestive wonder-if-I-can-sell-you-anything expression, but rather with a happy-to-serve-you air. The man full of confidence has a foil against failure, adverse criticism and mediocre success. Never say die until the undertaker comes.

AMONG THE RETAILERS.

Department Store Mail Ordering. Travelers, as a general rule, are more thoroughly acquainted with business questions than are most members of the trade. Going about the country, as they do, they not only scour their regions for orders, but all the possible information in connection with the trade is extracted from their customers. For this reason, while in conversation with a traveler the other day, I questioned him in regard to the headway the mail ordering system of the department stores was making. The question I asked him was: "Do you find that the department stores are hurting your particular business to any great extent?" "No," he said, "and I don't think that many travelers will tell you they do. I don't say but that they once did threaten to cut our throats, but I am thankful to say that that day seems to be drawing to a close. The same means that worked up a mail ordering trade for them is now bringing about the downfall of that method of doing business. That means is personal advertising. Department stores," he explained, "did not acquire their large trade through their many columns of newspaper advertising, nor through the reputation of their bargain days; it was this personal advertising that developed their trade through the post office. Most people in the country do not read those advertisements because they know that they cannot send in quickly enough to secure the bargains. But some person, perhaps, heard about these bargains and determined to risk an order. Low prices were unknown to him and he regarded them as a great discovery. He immediately let all his neighbors know about them and thus the department store received personal advertising. However, the duping schemes of these stores are being advertised even more quickly, and have now become so well known that they are standing jokes. Thus, then, their competition is gradually fading away, and promises soon to be of no account, especially with the advent of better times. This does not apply to the city trade, where the advertised bargains can be obtained, but it is now believed through the country that it pays to deal at department stores only on the occasion of a visit to the city. This," he said, "savors much of theory, but it has worked out practically. I think that most travelers will tell you the same thing."

A Cutlery Display.

The principal line that is being pushed just now is cutlery, and there are numerous unique designs around the Toronto windows for displaying these articles. A rather nice way of displaying scissors is shown in Russill's window on

King street, and I notice the same design in Vokes Hardware Co.'s window on Yonge street. A circle of a diameter of two feet is cut out of a thin board, and this is covered with bright red cotton. On this circle are tied the scissors, placed in the positions of radii to the circle. As the handles are wider than the points, the scissors are placed with the handles on the outer edge of the background. Four large pairs are placed at right angles to one another. Then, half-way between these, come smaller sizes, and the remaining space is filled with the smallest in stock. Thus all grades and sizes can be displayed. This seems all the more attractive when elevated above the goods in the window. It might well be hung from the ceiling.

Pointers on Window Dressing.

If on his visit to the city during Exhibition week, the country retailer picks up points on dressing windows and on arranging his goods in the store, he will profit more by that knowledge put into practice than by any ordinary bargains he may pick up. It is hard to say how many customers tasty arrangements of goods bring, but the fact that they are attractive is assurance that they bring some. Of course, cleanliness and brightness will bring more, and if these conditions are visible in a store they leave a great deal less work for attractive displays to perform. But many retail dealers do not seem to recognize the advisability of copying nice arrangements of the wholesaler. They go through the show rooms of the wholesale houses and look at the goods, yes, and even admire the method in which they are graded and shown off, but the thought doesn't seem to strike them that these displays will bear copying. The hardware merchant, if he only thought, can make about as much show as most dealers. Of course, the things he sells are not handsome, he deals in goods that are for use and not for show. He has no fruits to make the mouth water. But his wide range of sizes and his many grades give him opportunities for pleasing the eye which other merchants do not possess. He is gradually recognizing this, and the sooner he does so the better. The day is past when windows are dressed with rusty spades and hoes.

Changing Conditions.

It is becoming more evident every day that the hardware business is changing. It is becoming more like other retail trades. It seems to me to be losing that steadiness and never-go-fastness that seems to have characterized it. I don't mean to say that the amount of ability concerned in its management was not large and that pushing men have not been found in hardware stores, but seemingly hardware merchants never resorted to many tactics to

obtain custom as did other stores. This is due doubtless to the necessity for a fewer number of hardware stores than of other business. But apparently the last couple of years has seen a change. Profits have become much lower, and we now see signs in windows advising of a reduction of so many per cent. in such and such a line for a certain number of days. Competition has become much keener. It can hardly be said that this change in the state of affairs is going to benefit the trade as a whole. It may give a better opportunity to the man of more than ordinary ability to take advantage of his better qualities, but that would mean the drifting of trade into fewer hands. I have seen several men in Toronto who, a few years ago had a good hardware trade but who now are in some other business of the metal nature; a couple are in the bicycle repairing trade, and another has sacrificed his hardware trade for the tin-smithing. By making a specialty of a certain line these men seem to be making a better success than those who do not seem to notice the turn things are taking.

RAMBLER.

A MECHANICAL GLASS-BLOWER.

No invention in recent years has been more surprising than that of the machine glass-blower now being perfected for a manufacturing firm in the States. From the infancy of the glass industry, almost from time immemorial, glass-blowers have been regarded in a peculiar sense as skilled workmen. Their work has been regarded as difficult and delicate, and they have commanded exceptionally high wages. Now all this is to be changed by a machine, which, it is said, will do the work as well or better than the human blower, while one machine will do the work of three blowers at less than half the cost.

"Such an invention as that cannot fail to have an important effect on the glass industry. Its first effect will probably be to throw out of employment a considerable number of skilled workmen, but the industry will soon adjust itself to the change, and eventually all classes will be benefitted by the invention.

NEW COMPANIES.

The Canister Machine Co., Limited, has been incorporated.

The Toronto Paving Brick Co., Limited, has obtained a charter.

The Exeter (Ont.) Electric Light and Power Co., Limited, has obtained a charter.

The Railroaders' Gold Mining Co. of Ontario, Limited, Fort William, Ont., has received a charter of incorporation.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

BRITAIN AND OUR OIL TARIFF.

A British firm of oil refiners and exporters writing to us with reference to the new Canadian tariff, under which British goods are now admitted at $12\frac{1}{2}$ per cent. less duty than similar goods from the United States, remark: "We fear that a discrimination in our favor of $\frac{3}{4}$ of a cent. per Imperial gallon on lubricating oils will not avail us much. We must hope for 3 or 4c., which would help perhaps sufficiently to enable us to compete on equal terms." As the difference in favor of British oils will be only $1\frac{1}{4}$ c. per gallon even after August, 1898, there does not seem much chance of competition with American oils. It is to be hoped that in this trade Australia and New Zealand will do better for us than Sir Wilfrid Laurier has done. — British Trade Journal.

MACHINERY IN THE FILE TRADE.

As showing the progress the use of machinery in forging files is making in Sheffield, it might be stated that at the first quarterly meeting of the Sheffield Machine File Forgers' Union held recently it was stated that the members now number eighty-five. There are some who have not yet joined, and still it seems only yesterday when the first file was produced in this way. It is believed that the day is not distant when the great bulk of the forging, grinding and

cutting of files in Sheffield will be done by machinery. Apart from the excellence of the work, remarks an English paper, such a course has become a necessity if Sheffield is to hold her own in competition with German and American rivals.

RIVETING WITH COMPRESSED AIR.

In regard to riveting with compressed air, the master mechanic of the Santa Fe road is quoted as saying that by the use in the Santa Fe shops of a stationary riveting machine three men are enabled to drive 2,000 rivets per day of ten hours at a cost of \$4.75, as compared with 200 rivets per day at a cost of \$7 by hand labor. Truck riveters—the machine being operated by two laborers at a total cost of \$3 per day—drive 3,000 rivets, as compared with 175 rivets driven by hand labor by three men in a day at a cost of \$6, while the stay-bolt breaker makes an average saving of \$8 a day and the tank riveter an average daily saving of \$10. Further, the mud-ring riveters will drive as many rivets as can be handed to them and will make a saving of \$12 to \$15 a day for this class of work. Not only is this method credited with the great saving named, but is declared to insure every rivet hole being filled entirely and to insure tight work, while of hand-driven rivets in mud-rings a large percentage invariably leak.

SHIP-BUILDING IN NEWFOUNDLAND

Notwithstanding the fact that the last winter was a severe one upon our people, ship-building appears to be on the increase, and since the opening of navigation no less than forty-five have been registered. Of this number, however, a few were old vessels renovated and enlarged, but the remainder were built from native wood, principally in Green Bay, and can compare most favorably with any class of vessels of this type launched in any part of the world. On the other hand, we have the unfortunate side, and twenty-three have been reported lost or broken up since the beginning of the year. It is to be hoped that the casualties will be much less for the remaining months of this season, for every loss means serious inconvenience to a number of families.—St. John's Herald.

FIRE DID NOT STOP BUSINESS.

The premises of the Baylis Manufacturing Co., Montreal, which received a severe scorching some months ago, have been fully restored, and the works are now in as efficient condition as ever. They have pushed on the work of repairing with all possible speed, and to their credit it must be said that notwithstanding the crippled condition of the ground paint department they have filled all orders promptly and well.



Stove Boards

Established 1860
Incorporated 1895

SEAMLESS

Lithographed and Crystallized. No caps on corners to catch the dust or get pulled off. All new designs. Send for samples.

COAL HODS
STOVE PIPES
ELBOWS
FIRE SHOVELS, Etc.

THE THOS. DAVIDSON MFG. CO.
MONTREAL Limited

REVIVAL IN THE LEAD INDUSTRY.

MR. W. H. EVANS, of the Canada Paint Co., who has just returned from a short visit to the Old Country, observed many evidences of strength and encouragement in the lead-mining industry in Great Britain.

Mines which had been abandoned as unprofitable were being fitted up again, and much satisfaction prevailed in the counties where lead is mined. In Flintshire, especially, there was great activity. Brunner, Mond & Co. have secured several leases, and at North Hendre work is proceeding night and day by three shifts of men. Shares, which a few years back could have been bought in certain properties as low as half a crown (60c.), are now worth over £10 (\$50), and shareholders who loyally stuck to their shares during the depression are rejoicing in the receipt of continued lucrative dividends.

Sir John Brunner, M.P., has also made an announcement as to the working of zinc properties which is regarded as encouraging.

One fortunate smelting firm remarked to Mr. Evans, who was enlarging on the vast riches of the Kootenay and Yukon districts: "Well, we have a Klondyke right here at home with five meals a day and no horrors of the White Horse Pass or the Kicking Mule Trail!"

REMOVING TO WINNIPEG.

Mr. Richard Bull, late of Hamilton, who has been for some time with the Vokes Hardware Co., of Toronto, has received an appointment with J. H. Ashdown & Co., Winnipeg, Man. Mr. Bull is a first-class hardware salesman and "pricer," and his numerous friends, while regretting his departure, are greatly pleased at his success.

NEW PROCESS FOR SEAMLESS TUBES.

An improvement in the manufacture of seamless metallic tubes has recently been patented by two Midland, Eng., engineers. Three shafts are provided, which rotate by means of appropriate gearing. Upon each of these shafts is secured a series of rolls having their edges convex. These rolls diminish in size from one end of each shaft, which can be called the leaving end, the rolls at that end being the largest. The series of rolls on each shaft diminishes in size in a similar manner, so that the three largest rolls—that is, one on each shaft—are in one plane as the leaving end, then the three next largest in plane parallel to the first, and so on. The effect of placing the rolls on the shafts in this manner is that between the smallest rolls there is a central aperture which is large enough to receive, or very nearly to receive, the short thick tube when presented to it endwise. The

tube, being forced, is seized by the next set of rolls, and a reduction of external diameter with an increase of length is the consequence. From these rolls it passes to the third set of rolls, and so on, until it emerges from between the largest set of rolls at the extremity of the machine.

RADIATION FROM RED HOT IRON.

A correspondent of Metal Worker asked: "Please tell me how much heat is radiated from an iron casting weighing 1 pound when raised to a red heat, the casting being incased in a sheet metal jacket with a flue to and from so that it is supplied with fresh air."

The answer was: "The specific heat of cast iron is 0.129, water being equal to 1, or 1 heat unit per 1 pound of water raised 1 degree F. One pound of cast iron heated to 1,000 degrees F. above the atmospheric temperature will therefore contain $1,000 \times 0.129 = 129$ heat units; which, if transferred to air circulating through a jacket as described, without loss by radiation from the outside of the jacket, should heat 542 pounds of air 1 degree F. The specific heat of air being 0.2377 of a unit per pound, and as about 13 cubic feet weigh 1 pound, the total amount of air heated 1 degree F. would be about 7,000 cubic feet. This is the gross theoretical result without loss of heat otherwise. The practical result will be a stream of intensely hot air issuing from the jacket at first and gradually cooling to normal temperature, the total radiation of which will be, as above stated, 129 heat units."

SCARCITY OF IVORY.

The difficulty in obtaining high class ivory suitable for fine work is an ever increasing one and we may expect for some time to come to hear of prices going up. The ivory which has recently come to hand has been of a much coarser grain than in former years. The impression among some ivory cutters is that the coast lines, so to speak, having been swept of ivory, it has now to come from the interior, and whether it is that the herbage is coarser or what, they are unable to tell, but the interior ivory has undoubtedly not the fine grain which Sheffield manufacturers have been accustomed to. Buyers who attended the recent sales report that the famous Benin ivory of which so much has been heard is of a very inferior quality. The greater part of it was apparently so old as to have lost all its virtue and has practically perished. The most valuable part of the loot were the carved tusks some of which realized considerable sums. Sheffield cutlers have recently added 5 per cent. to the list for the better qualities, but no change has yet taken place in the commoner qualities of ivory. A further upward movement may shortly be expected.—Hardwareman.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.
Norwich, Conn., U. S. A.

Brushes

Catalogue

for

1897

Now Ready

MEAKINS & CO. 313 St. Paul Street . . . **MONTREAL**
and Meakins & Sons, Hamilton.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,
Hamilton and Toronto.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS
PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate.
MARION & MARION, EXPERTS,
Temple Building, 185 St. James Street, Montreal.
The only firm of Graduate Engineers in the Dominion transacting patent business exclusively.
Mention this paper.

Cross Cut Saws . .

Premier, Racer and Maple Leaf.

Buck Saws . . .

Happy Medium } plain and painted.
Watch Spring }

Empire
Common, plain and painted.

WRITE FOR PRICES.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.



**THESE
THREE
WORDS**



in letters
of fiery
red

will make the careless employe pause when about to use Indurated Fibreware Fire Pails for chores. Besides, he couldn't if he would—the round bottom prevents their being used but “for fire only.”

The E. B. EDDY CO., Limited

HULL, MONTREAL, TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Sept. 24, 1897.

HARDWARE.

THE hardware market shows many welcome signs of buoyancy, and as a result of this demand is of expanding volume. This is noticeable in the case of wire and cut nails, horse nails and horse-shoes, screws, bolts and rivets, while there is a brisk demand for ware, cutlery and sporting goods of all sorts. Sisal cordage is firmer, and the strength in shot is quite marked. Some large contracts have been put through in cement, and altogether the aggregate trade for the week has been quite large.

BARBED WIRE—There is little or nothing doing in barbed wire. We quote the basis as before, \$2.25, f.o.b. Montreal, Toronto, Hamilton and London.

PLAIN WIRE—Some demand is experienced for hay-baling wire, but otherwise the movement is light. Discounts are 30 and 5 per cent.

WIRE NAILS—There has been a fair enquiry for wire nails, and prices are unchanged at a range of \$1.85 to \$1.90.

CUT NAILS—Business in these continues as noted last week, with the basis unchanged at \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is a good enquiry

for jobbing lots of horse nails, and the discount is unchanged at 50 per cent.

HORSESHOES—There is a good enquiry both for steel and iron shoes. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is no change in these, business continuing fair. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Trade quiet, and discounts unchanged at 12½ per cent.

BOLTS—The good enquiry for these is maintained. Discounts are as follows: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach, 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

HARVEST TOOLS—A few scattered orders are reported.

SPADES AND SHOVELS—Demand for these has picked up to an appreciable extent.

FILES—As last reported. We quote as

follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

RIVETS—Trade active. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

CORDAGE—There is a fair enquiry for cordage. Sisal is ¼c. firmer. We quote: Sisal, 7-16 and upwards, 5¾c.; ¾, 6¾c.; 5-16 and ¼, 6¾c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7¾c.; 5-16 and ¼, 8c., and 3-16, 8¾c.

CHURNS—Quiet, with discounts unchanged.

CLOTHES WRINGERS—Enquiry continues very light.

CARPENTERS' TOOLS—Orders for these continue.

BUILDING PAPER—Trade is quiet. We quote 30c. for plain building, 40c. for tarred lining, and \$1.38 to \$1.40 for roofing.

LEATHER BELTING—Trade is fair. We quote: Standard, 55 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 65 and 5 per cent.

WARE—There is a fair demand for all kinds of ware, granite, plain iron and tin-ware.

HINGES—A fair demand is noted. We quote: Screw hook and hinge, 6 to 10 inch,

MARS

DOUBLE HEATER

A New Stove

TAKES 27-INCH WOOD

Heavy sectional linings that can be easily replaced.

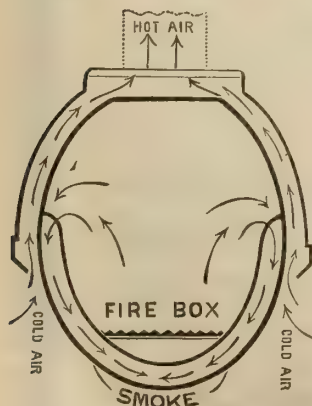
Flues same as in a base burner.

Legs and base packed inside for shipping.

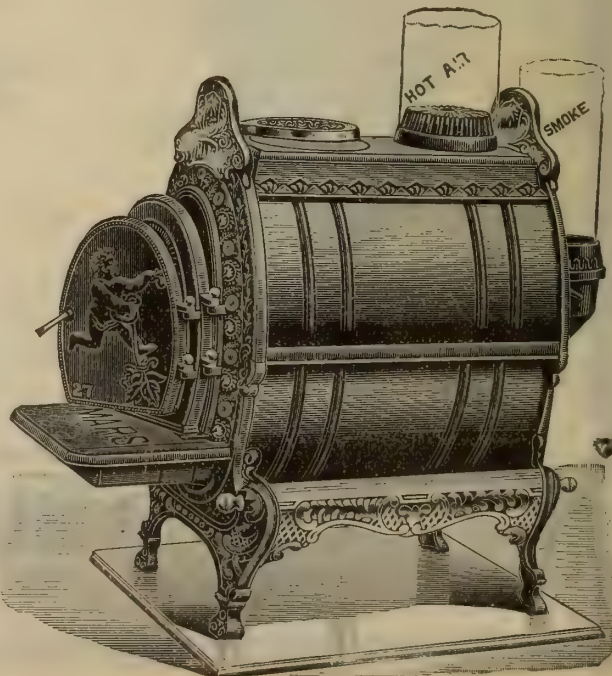
Has one 8-inch pot hole over fire-box

Russian iron body with nicked trimmings.

WRITE FOR PRICES



Cut shows smoke passage and circulation of hot air.



THE McCLARY MFG. CO.

London, Toronto, Montreal, Winnipeg, Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington Street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman Sporting Goods Co. 403 St. Paul St. MONTREAL

\$3.50 per 100 lbs.; 12 inch. up, \$2.50 per 100 lbs.

CUTLERY—An active demand is experienced for both table and pocket cutlery.

SLEIGH BELLS—Fair orders continue for these.

SPORTING GOODS—Business is brisk in guns, rifles and ammunition.

SHOT—Continues firm and active at the advance. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent. trade discount.

CEMENT—There has been an active trade in both English and Belgian cement for prompt and future shipment. We quote: Belgian, \$1.85 to \$1.95, and English is purely nominal.

FIREBRICKS—There is a fair enquiry for firebricks at \$16 to \$21 per 1,000, as to brand.

METALS.

The firm tendency continues in all lines of heavy iron and metals, while the demand is, if anything, larger than it was.

PIG IRON—Values have a firm tendency and some good lots have been put through both of domestic as well as Scotch pig. We quote: No 1 Hamilton, \$16; No. 2, \$15; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18; Ayrshire, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—There has been a good enquiry for bar iron, and the mills report the movement of quite a few car lots. We quote as before, \$1.35 to \$1.40.

BAND IRON—A good enquiry is noted on the basis of \$1.65.

HOOP IRON—Prices are firmly held under a good enquiry and light stocks at \$2.25.

SHEET STEEL—The base price is firmly held at \$2.35, with demand quite active.

SHEET IRON—All kinds of sheet iron have continued in good enquiry and the base is firmly held at \$2.25.

GALVANIZED IRON—There is an active enquiry for galvanized iron and shippers have had difficulty in filling all their orders. We quote prices firm at \$4.15 to \$5.25 as to grade for British sheets.

TINNED IRON—In fair enquiry with prices steady; 6 x 30 "Bradley's" No. 24 basis, 5½c.; other sizes and gauges the usual extras.

LEAD PIPE—The advance in lead pipe is firmly maintained and enquiry has been more active this week than last. We quote lead pipe 7c. per pound and composition and waste 7½c., subject to a discount of 27½ per cent.

PIG LEAD—There has been no change in pig lead which we quote at \$3.85 to \$4.

INGOT TIN—Values outside are steadily held, and spot prices are strong in sympathy. Business is moderate at 16 to 16½c.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

.. MONTREAL

MERCHANT BAR IRON—

	BRAND
Best Refined Bar Iron	AVB
" " Rivet Iron	AVB
" " Horseshoe Iron	
Ex. Best " Bar Iron	AXB
" " Rivet Iron	AXB
" " Stay Bolt Iron	AXB
" " Hammered Iron	AHB
" " Charcoal Iron	ACB

Tyre, Sleigh Shoe,
Axe and Rivet STEEL.

Nova Scotia Steel Co.

Limited

NEW GLASCOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNally & Co. - MONTREAL

INGOT COPPER—Values continue very firm in copper, though there is no quotable change from 12 to 12½c., last week's range.

SHEET COPPER—There has been a fair enquiry for this line of material. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Demand is quiet this week despite the firm tone of the market. We quote as follows: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.90; ½-inch, \$2.35; ¾-inch, \$2.84; 1-inch, \$3.91; 1¼-inch, \$5.25; 1½-inch, \$6.66; 2-inch, \$8.97. Galvanized pipe, ¼-inch and ¾-inch, \$3.10; ½-inch, \$4.15; ¾-inch, \$5; 1-inch, \$7; 1¼-inch, \$9.70; 1½-inch, \$13; 2-inch, \$17.25.

CANADA PLATES—There has been an active enquiry for Canada plates, and several round lots have been turned over here at inside prices for shipment to western jobbers. Prices are unchanged on the basis of \$2.10 to \$2.25.

TIN PLATES—There has been a good enquiry for coke tin plate during the week. We quote: Coke I. C., \$3 to \$3.20; charcoal, I. C., Allaway, \$3.25; do. I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do. I. X., \$4.50.

TERNE PLATES—There is a good demand for these, and stocks are rather poorly assorted. The base is stiff at \$6.

BOILER PLATE—Firm and unchanged at \$1.90 to \$2.

COIL CHAIN—Remains quiet on the whole.

SHEET ZINC—There is a fair demand for sheet zinc at 5¼ to 5½c.

SOLDER—Moderate demand at 12c.

SPELTER—Unchanged at \$4.75.

ANTIMONY—Quiet at 9½ to 10c.

SCRAP IRON—Sales of No. 1 wrought have been made at \$12 to \$12.50.

PAINTS, OILS, ETC.

Makers report a steady business passing in the various lines. Trade in some sections is slow on account of the far too

numerous exhibitions which interfere with the short season available for fall trade. White lead continues in very active demand at the advance reported in our last. Stocks everywhere appear to be light and the probability is that all the lead available by the manufacturers will be required for the fall demand. Turpentine continues to gather strength at sources of supply; the advance from the lowest point now amounts to 5c. per wine gallon. Our quotation is accordingly again marked up 1c. since last report, and is firm thereat. Linseed oil continues in good demand, without change in price. English quotations are somewhat easier, but domestic oil represents a greater factor in fixing our prices than in former years. Putty is in active demand. Some cutting in price is reported, but in view of the recent advance in linseed oil the outlook suggests better figures. Varnishes continue moderately active.

WHITE LEAD—Firm and active. We quote: Government standard, \$5.37½; No. 1, \$5; No. 2, \$4.62½; dry white, \$4.75.

RED LEAD—In good request at last week's advance: Genuine in casks, 4½c.; kegs, 4¾c.; No. 1 in casks, 4¼c., in kegs, 4½c.

LIQUID PAINTS—All kinds in fair request.

PUTTY—In active demand. We quote: Bulk, \$1.60; bladder in barrels, \$1.75; tinned in cases, \$2 per 100 lbs.

LINSEED OIL—Steady but unchanged. Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Again higher. Single barrels, 46c.; 5-barrel lots, 1c. less per gallon.

OILS—The demand is only fair. Gaspe cod is unchanged at 28 to 29c., and Newfoundland 33 to 35c., but the inside price was shaded 1c. for a round lot. Castor oil has scored another advance of ½ to 1c. and is now held at 10½ to 11c. for cases.

GLASS.

The glass market is quite steady in its

tone with a fairly active trade passing. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Owing to keen demand and light receipts a sharp advance in prices has taken place, and a sale of a round lot of firsts was made at \$3.50, but buyers to-day would even pay an advance on the above figure. Second pots and pearls are nominal, as none are offering.

CHEMICALS, ETC.

There is a fair trade in chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Hides are unchanged; lambskins, 50c. each, and beef hides 6 to 8c., as to grade.

PETROLEUM.

Canadian petroleum in car lots sold this week at 13½c.; smaller quantities fetch 14½c. American is held at 16½c. for refined in car lots; 17½c. for small.

COAL.

The coal market is quiet. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

The statement has been made in connection with the game report that the season for shooting quail opened on the 15th inst. This statement is erroneous, as the close season for quail does not close until the 15th of October. A prominent sportsman states that at the present time the younger broods of quail are not yet fit to be slaughtered, and that it will be in the interests of true sport if the quail are let alone until the 15th of October, as the law calls for.

HORSE NAILS, "M" BRAND, 1897

WE MAKE



All packages bear our

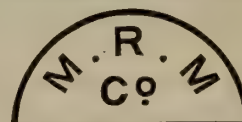
Oval Head in Nos. 4 to 12

"New Countersunk" Head in Nos. 5 to 12

New City Head in Nos. 2 to 8

MADE SOLELY
BY US.

Trade



Mark

We guarantee our Nails to be standard, hot forged and cold finished. If found defective we will replace them free of charge and pay freight both ways.

MONTREAL ROLLING MILLS CO.

MONTREAL

Rock-Faced Brick

Sheets cover when laid $22\frac{1}{2} \times 17\frac{1}{2}$ inches. 37 sheets to a square (100 square feet):

Bricks are $7\frac{1}{2} \times 3$ inches.

Sheets are laid from LEFT to RIGHT, the narrow flanges overlapping the wide flanges.

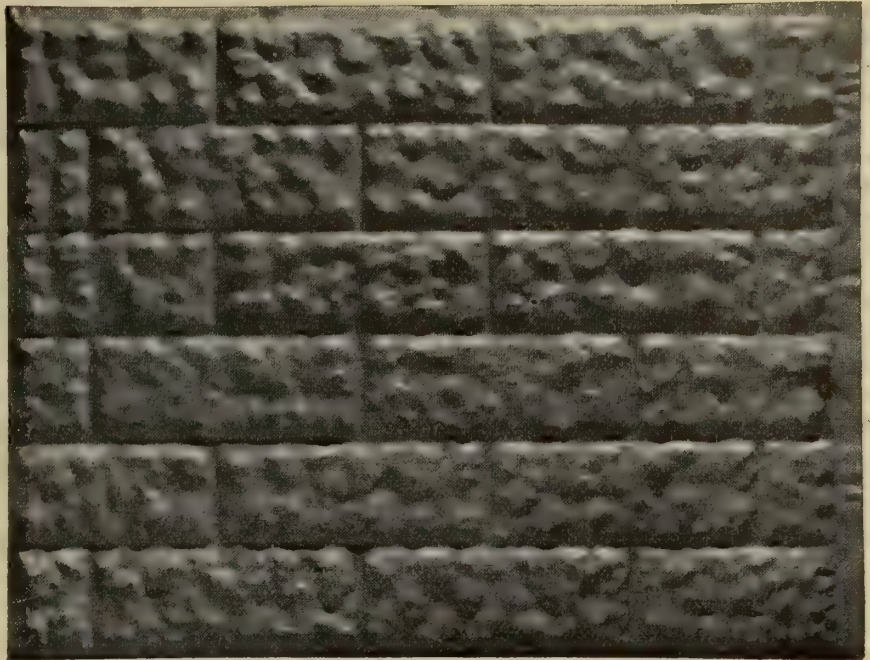
Illustration is an exact photographic reproduction of one single sheet.

This Siding (our latest production) is a very careful reproduction in sheet metal of the very best pressed Rock-Faced Brick, and cannot easily be distinguished from it.

- CONSTRUCTION -

This Siding is so constructed that the sheets have a plain flange on all four sides, which overlap each other at the top and side. The overlapping flanges are the same width as those which divide the stones or bricks on each sheet, so that the joints are not noticeable, and every line of joint is crossed or broken.

In this way the objectionable features which characterize other makes of siding, where locks are used on the sheets, making an unsightly seam very unlike real stone or brick, are entirely removed in these Sidings, imparting a character to the work, and making them unquestionably the very latest improved and best up to date Sidings yet produced for covering the exterior walls of all classes of buildings.



Sole Manufacturers

THE METALLIC ROOFING CO. of CANADA, Limited

HEAD OFFICE AND FACTORY,

Cor. King and Dufferin Streets, TORONTO, ONT.

WRITE FOR QUOTATIONS.

The Originators and Pioneers and most extensive makers of sheet metal building material in Canada.

ONTARIO MARKETS.

TORONTO, Sept. 24, 1897.

HARDWARE.

CONFIDENCE in trade continues to increase, and everyone is ready to acknowledge that better times are here. The volume of business in the wholesale hardware trade during the past week has been fairly good. Cutlery, sporting goods, certain harvest tools and seasonable goods generally are going out well. Plain wire is moving more freely, but all other wires are quiet, and barb wire is being cut in price somewhat. The most unsatisfactory feature of the hardware trade at the moment is the cutting in the price of wire nails, although the volume of business is fair. Business in builders' supplies is better than it has been for some time. The advance noted the other day is sisal rope has been followed this week by a decline of $\frac{1}{4}$ c. per lb., due to competition among local jobbers.

BARB WIRE—The factories report a small movement, but trade on the whole is quiet. Prices are a little lower than they were, \$2.15 now being the ruling figure.

ORDINARY FENCE WIRE—Quiet and unchanged. Discount is quoted at 30 to 35 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—This is moving more freely, especially coppered steel and coppered spring. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—Business, if anything, is brisker than it was, but manufacturers and jobbers are cutting prices, \$1.95 to \$2 f.o.b., with a rebate of 10c. per keg, being freely offered.

CUT NAILS—Quite a number of orders have been received this week, but trade in this line is nevertheless quiet on the whole. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—The improvement noted last week has continued. Discount unchanged at 50 per cent.

HORSESHOES—Are in strong demand, quite a large quantity having been forwarded during the week. We quote as follows: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—Trade is fair. Discounts are: Flat head bright, $87\frac{1}{2}$ and 10; round head bright, 80 and 10; flat head brass, $82\frac{1}{2}$ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is still quiet. Discounts are $12\frac{1}{2}$ per cent.

BOLTS—A good trade is still being done, although some houses report a slight falling off in the demand. Discounts are as follows: Common bolts, 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and 5-16, 70 per cent.; ditto, $\frac{3}{8}$, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, $\frac{3}{8}$ and larger, 4c. per lb.; 5-16, 5c. per lb., $\frac{1}{4}$, 6c. per lb.

RIVETS AND BURRS—Although trade is not quite so brisk as it was, yet orders are still coming in freely. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to $2\frac{1}{2}$ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Trade is fair. Discounts are $17\frac{1}{2}$ per cent.

ROPE—The advance noted last week in

sisal has been followed this week by a decline of one-eighth cent per lb. We quote as follows: Sisal, 7-16 in. and larger, 5½c.; ¾ in., 6c.; ¼ and 5-16 in., 6½c.; 3-16 in., 7½c. Manilla, 7-16 in. and larger, 7½c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8½c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Quiet and unchanged. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—The improvement noted last week appears to have been maintained. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

HARVEST TOOLS, ETC.—There has been an exceptionally good demand during the week for corn hooks, grass hooks and corn knives. Jobbers are experiencing some difficulty in supplying the demand, particularly for grass hooks. Discount on harvest tools, 60 and 10 per cent.

SPADES AND SHOVELS—The slight improvement in the demand noted last week has been maintained. Discount, 45 and 2½ per cent.

BUILDING PAPER—Business has improved during the week, and may now be termed brisk. Prices are lower. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.

LEATHER BELTING—Business is good, and some of the mills are so busy that jobbers cannot get stock. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—While there is not the quantity of granite ware and tinware moving that there was a week or two ago, yet there is still a good business being done. The discount on stamped ware is 80 and 10 per cent. revised list.

CUTLERY—Trade continues brisk in all lines of cutlery.

SPORTING GOODS—Guns, rifles, ammunition, etc., are all in brisk demand.

HINGES—Trade remains fair. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

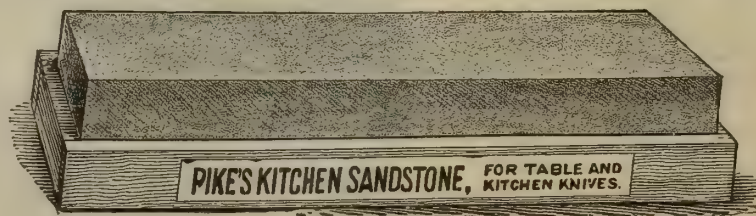
BUILDERS' SUPPLIES—Trade is a great deal better than it has been for some time.

CEMENT—A decided falling off has been experienced in the demand for cement. Trade is much lighter than it was last year at this time. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Cana-

STANDARD of
for
30 Years

NICHOLSON
FILES

NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

For Sale by Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

dian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The metal trade is in a fairly healthy condition, with prices as a rule steady. Our quotations on American galvanized iron are higher.

PIG IRON—The market is firm, with prices higher than they were about ten days ago.

BAR IRON—A further improvement is to be noted in bar iron, principally in the larger sizes. We quote base price at \$1.40 in carload lots at factory and \$1.50 to \$1.55 in smaller quantities.

HOOP AND BAND IRON—Trade is fair. We quote \$2 per 100 lbs.

SHEET STEEL—The demand is not quite as good as it was a week ago, but a fair quantity is moving. The demand is principally for the better qualities. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—While very few large sales have been reported, trade during the week has been what may be termed fair. We quote as follows: 10 to 12 gauge,

\$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The price of American iron has been advanced 20 to 25c. per 100 lbs. Although some shipments of galvanized iron have arrived during the past week, jobbers are still experiencing difficulty in filling orders. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—There is just a moderate business doing. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

SHOT—The demand is still good, although orders have not been as large as they were a week ago. We quote: Dropped shot, 6c.; chilled do., 6½c. buckshot, 7c. Discount, 12½ per cent.

SOIL PIPE—Trade is moderate. Discount is 60 and 10 per cent.

PIG LEAD—Business is on the quiet side, although a few good shipments have been made. The markets are strong, and prices locally are unchanged. We quote 4 to 4½c. per lb., according to quality.

INGOT TIN—Trade remains fair. Prices locally are unchanged, but in both London and New York values are a little easier. We quote 16¼ to 16½c. per lb.

INGOT COPPER—The copper market is steady as to price. Locally business is quiet, with 12c. per lb. as the idea as to price.

SHEATHING COPPER—Has been moving more freely this week. Quite a number of case orders have been received. Braziers' is quiet. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Very few large shipments are reported, but trade is fair in a small way. We quote: Wrought, ¼ to ¾ inch, 1½c.; ½ inch, \$2.25; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

RANGE BOILERS—The demand is active. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Are moving freely. There still appears to be a dearth of all bright. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—The slight improvement noted last week has been maintained, principally in the better quality. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

COIL CHAIN—Quiet. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Is moving nicely at firm prices. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

TERNE PLATES—Trade is still fair. No large sales are, however, reported. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SOLDER—Business is quiet. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

What's in a Name

A brush is known by the name it bears. . . .

Boeckh's Brushes for Painters are all stamped with the name "Boeckh."

Boeckh's name on a painter's brush means that that brush was made on honor, down to the very smallest detail.

CHAS. BOECKH & SONS, Mfrs., Toronto, Ont.

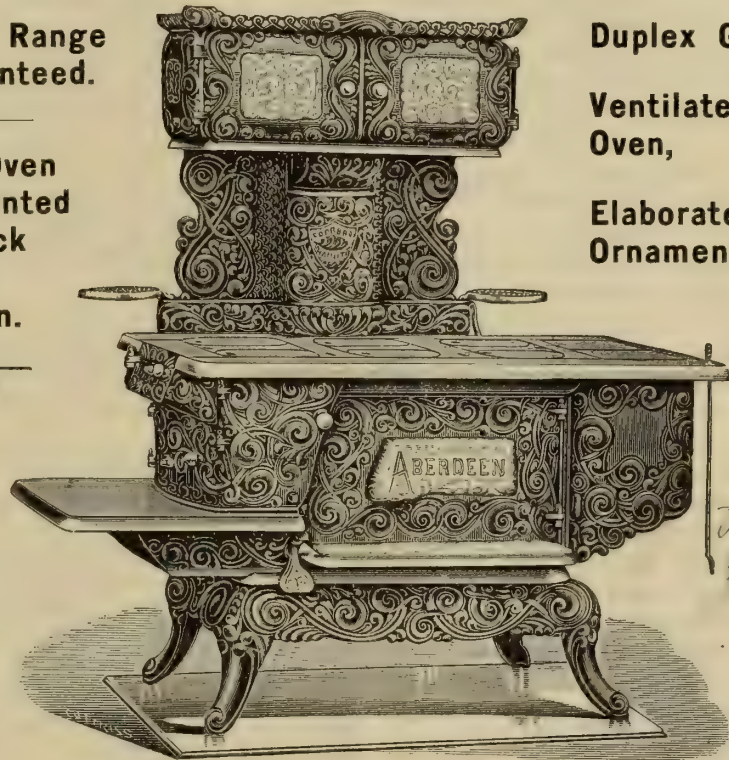
Every Range
Guaranteed.

The Oven
Warranted
Quick
and
Even.

Duplex Grate,
Ventilated
Oven,

Elaborate
Ornamentation,

Long
Fire-
Box
for
Wood



Aberdeen Warrior Range

Our New and Beautiful Range

has been on the market one year, and of the many sold there has not been a single instance of failure.

The Aberdeen is remarkably handsome in appearance, and, as will be seen from the engraving, is of the very latest style and construction.

The COPP BROS. CO., Limited

HAMILTON

ANTIMONY—Business is moderate. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

OLD MATERIAL.

The iron trade continues dull. Hardly any shipments are coming forward and practically nothing is going out. There is a good demand for woolen rags, and the supply here is scanty owing to the heavy shipments made to the States this year. Cotton rags are a drug on the market. The business in the finer metals shows no change. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, $42\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, $7\frac{3}{4}$ c. per lb.; bottoms, $7\frac{1}{2}$ c.; heavy copper, $7\frac{3}{4}$ to $8\frac{1}{4}$ c.; light scrap brass, 4 to $4\frac{1}{2}$ c.; heavy yellow scrap brass, $5\frac{1}{2}$ c.; heavy red scrap brass, $6\frac{3}{4}$ c.; scrap lead, $2\frac{1}{4}$ to $2\frac{1}{2}$ c.; zinc, 2c.; scrap rubber, 3 to $3\frac{1}{4}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

The firm feeling continues to prevail in glass. Foreign quotations are even firmer this week, and, in the opinion of the dealers here an advance is not far off. Trade has not been so brisk this week, owing to the fall fairs all over the country. Travelers, however, are sending in some nice orders. We quote: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

Money is cheap and property is low; the community at large are commencing to look around and try and improve their holdings by repairing and decorating. A poetic hardwareman says the phrase, "one touch of nature makes the whole world kin," might be paralleled by, "One touch of paint makes the whole world bright." Liquid and domestic paints have been actively enquired for and prices are well maintained. Varnishes for household use are meeting with a ready sale, and the various factories are employing their full complement of hands and are liberal buyers. If the hindrances to business owing to the extraordinary number of autumn fairs were eliminated, or at least curtailed, trade may be said to be in a healthy condition. The three great staples—lead, oil and turpentine—are all in active demand and prices at headquarters have advanced. We may therefore look for higher figures at any time. Varnishes and japans are being shipped more freely. Putty is in good demand and quotations are firm. Carriage specialties, such as priming,

rough stuff and varnishes, show some movement. Bicycle enamels and sundries are flat and slow of sale. There has been much appreciation in the price of red lead and orange mineral. Both are up 25c. per 100 lbs. Chromes and ochres are rather quiet, but ground and distemper colors are in better request.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.22½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$5; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—26c.

PLASTER PARIS—Ordinary, \$1.40 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, $5\frac{1}{2}$ to $6\frac{1}{2}$ c.; orange mineral, $6\frac{1}{2}$ to $7\frac{1}{2}$ c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 48c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—The market is almost bare of hides, and shipments to the United States keep the market up. Local tanners have to pay within 15 per cent. of what tanners in the States are paying. There is no alteration in prices. The demand which is good is about equal to the supply. Cowhides: Dealers pay $8\frac{1}{2}$ c. for No. 1, $7\frac{1}{2}$ c. for No. 2 and $6\frac{1}{2}$ c. for No. 3.

CALFSKINS—Trade is about the same; a steady volume of business is doing. We quote; No. 1 veal, 8 lbs. and up,

10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 65 to 75c.

WOOL—An increased demand has exceeded the supply and as a consequence prices are considerably firmer. Dealers are paying fully 1 to $1\frac{1}{2}$ c. more than they paid last week. This is contrary to the expectations of those in touch with the markets a month or so ago. Fleece wool now brings 20 to $20\frac{1}{2}$ c.

PETROLEUM, ETC.

Some nice orders for illuminating oil have been received this week. Trade in this line, however, will be heavier in a few weeks' time. Lubricating oils are still being called for, although the trade has fallen off considerably. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, $16\frac{1}{2}$ c.; Canadian water white, 17c.; American water white, $17\frac{1}{2}$ c.; Pratt's astral, 17c. in bulk.

COAL.

The demand for coal during the past week has been exceedingly brisk. Orders could not be filled at the beginning of the week. The rush was caused by this, the first cold spell. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Building paper is a little lower.

Sisal rope has declined $\frac{1}{8}$ c. per lb. from the recent advance.

Galvanized iron of United States manufacture is 20 to 25c. per 100 lbs. dearer.

H. S. Howland, Sons & Co. are putting a shaving soap on the market in cakes and sticks.

For the Toronto Lead and Color Company this fall the western route will, as usual, be taken by Mr. George Verry. The northern ground is covered by Mr. I. W. Shorney. Both travelers are doing well in their respective territories.

TO RENT.

A FIRST-CLASS BUILDING, LARGE AND COMMODIOUS, with modern improvements, suitable for Dry Goods, Groceries or Hardware. Apply to A Warnock, Galt, Ont.

BUSINESS CHANCE.

PARTNER WANTED IN A GROWING HARDWARE business in a live town in B. C.; one who can command a capital of \$5,000 and not afraid to rustle; correspondence solicited. Address, J. V., care HARDWARE AND METAL, Toronto. (40)

DOMINION FLINT PAPER CO.

Hamilton, Ont.

Supplying the Canadian demand with Improved Paper to sand paper the whole Dominion.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 669.
Cable "LeVesconte" Toronto.

UNITED STATES MARKETS.

NEW YORK, Sept. 24, 1897.

PIG TIN—There is no surface display of activity in the market, but business of considerable volume continues to be effected quietly between importers and consumers direct, and fair sales to the interior jobbing trade are being made also. Business was mostly at prices on the basis of 13.85 to 13.87½c. f.o.b.; and 13.80c. in store for lots of about five tons. The London market was a shade lower at the close.

COPPER—To all accounts no large sales are being made, but a very fair business is passing in moderate-sized lots, chiefly for export account. The mining companies remain in much the same position that they have been for some time past, and quote, with some showing of firmness, at 11¼ to 11⅜c. for Lake Superior ingot, 11 to 11⅝c. for electrolytic, and 10⅞ to 11c. for casting stock. No important change in London was cabled.

SPELTER—There is little if anything more than carload lot business here, and the eastern demand generally is moderate. Prices are slightly irregular, with 4.25 to 4.30c. quoted. London cable was £17 11s. 3d. for good merchant brands.

ANTIMONY—Values remain steady at about 7¼ to 8½c., as to brand, with fair business, mostly in a jobbing way.

TIN PLATE—American cokes are still scarce on spot and selling at considerable premium over future delivery, but business is only fair. Foreign plates are in very light supply and held at high prices. There are few buyers, however, outside of packers of export goods.

IRON AND STEEL—There continues to be a very good movement of pig iron, mostly in moderate quantities, and prices are steady. Old material is faring quite well also. In manufactured products there is only fair movement here, but quite good business in various lines in the west.

A NAILLESS HORSESHOE.

Like the perpetual motion, failures have been many in the invention of a nailless horseshoe. At last, however, according to an exchange, the problem seems to have been solved by a German inventor. A company has been formed in London to manufacture it on a large scale. The shoe may be described as on the broad welt principle; that is, the shoe is broad enough to take clips which hold the outer wall of the hoof by means of sharp points, which, bending inwards and downwards, penetrate the wall and thereby hold the shoe in its place. These clips are, in turn, supported by wedges which are driven upwards through slots in the shoe, so that the more the shoe

is used, the more firmly the clips are secured. On the other hand, if it is desired to remove the shoes, the knocking out of the wedges easily liberates them. The shoe is stated to have been tried for more than a year by a German army corps, with the result that a large order has been given. Prof. B. Peter, of Berlin, expresses his great admiration of the invention, and a breeder of horses for thirty-five years says that it is the only nailless horseshoe which commends itself to him.

IRON AND STEEL COMPANIES' SHARES.

THERE can be no more safe way of measuring the prospects of the iron and steel trades than that of comparing the prices of the shares at different periods. The dealings in these shares are not liable to any fluctuations of speculation on the Stock Exchange. As a rule a seller is prepared to deliver, and a buyer is prepared to take up and pay for, whatever shares he may have sold or bought. The shareholders who occasionally wish to reduce or increase their holdings, do so with a full knowledge of what has been done or is likely to be done at the works. The prices of such shares afford a safe criterion or barometer of the state of the trade. This criterion is, indeed, safer than that of the Board of Trade Returns, since these can only deal with imports and exports, and are silent as to home trade and home consumption. We propose to apply this in the case of companies quoted in the Stock Exchange lists on the 1st of April and on the 1st of September. We may notice that all these companies paid some dividend or other at their last half-yearly meeting, and we leave out of account preference shares and debentures which in most cases are not affected so much by the current year's trade as by the value of money. Now, the middle price of the Barrow Hematite Co.'s fell from 2½ to 2¼; Bolckow, Vaughan & Co., with £20 paid, fell from 16½ ex. dividend to 17, and the shares, on which £12 has been paid, from 9 to 8¾; John Brown & Co., with £15 paid, were 21 on 1st April and 18½ on the 1st September. The Consett Iron Co. affords a consolitary change. Its ordinary shares, with £7 10s. paid, were quoted at 21 on April 1, and 25 ex. dividend on September 1. But the Consett Co. has an exceptional property, and is an exception that proves the rule. In the case of the Ebbw Vale Co., we go back again from 7 to 6¾, while the General Mining Association advanced from 6 to 7. The Harvey Steel Co., of Great Britain, only changed from 31 cum. dividend to 29 ex. dividend. Rhymney iron shares, £5 paid, fell from 1¼ to 1⅞. It is remarkable that the Nantyglo

and Blaina Ironworks is quoted only for preference shares on which 62½ has been paid, and which have been reduced in value from 96½ to 95. The ordinary shares of Vickers, Sons & Co., on which £10 has been paid, advanced from 28½ to 28 ex. dividend.

A few examples may be given of coal companies which do not raise or sell iron. The new Sharleston, £20 paid, fell from 11 to 10; North's Navigation Collieries, £5 paid, remained stationary, at 2; The Newport Abercarn Black Vein Steam Coal rose, £10 paid, from 3½ to 3¾; and the South Hetton Coal Company, £100 paid, rose from 130 to 143. If we look over the whole list we shall find that the only instances of any material advance have been those of the Consett Iron Company and the South Hetton Coal Company. In all the other cases there was no improvement, or one so trifling as not to deserve notice—Iron and Steel Trades Journal.

ARTIFICIAL PUMICE STONE.

A good deal of artificial pumice stone is now being sold in the United States. It is claimed to be better than natural pumice stone with respect to grain, hardness, shape and uniformity. It is also said to have the advantage of freedom from the little gritty particles that often occur in powdered pumice stone from faulty bolting material, or carelessness of workmen. As another advantage it is claimed that every stone is fit for use, while natural lump pumice is subjected to such injury in transportation that much of it arrives in a broken condition. This artificial pumice stone is being used by carriage makers, marble workers, lithographers and others.—Industrial World.

BICYCLE TIRE CEMENT.

(1) To those who feel a longing to make their own tire and repair cement, the following will be found to be an excellent formula: Crude rubber, half an ounce; resin, one ounce; beeswax, quarter of an ounce; carbon bisulphide, half a pint. Macerate the rubber in four ounces of bisulphide for 24 hours, then dissolve the resin and beeswax in four ounces of the solvent and mix the two solutions. (2) An excellent cement for cycle tires is made of bisulphide of carbon, 160 parts; gutta percha, 20 parts; rubber, 40 parts; isinglass, 10 parts.—Boston Journal of Commerce.

OFF TO EUROPE.

Mr. P. J. McNally, the well-known paint and oil man of Toronto, sailed from New York on Wednesday last ex St. Louis for Europe, visiting Great Britain, Belgium and Sicily. **HARDWARE AND METAL** wishes him bon voyage.

TRADE CHAT.

TO remove grease from the saddle and bags make a solution of India rubber, by adding bisulphide of carbon to unvulcanized rubber, and letting the mixture stand about 24 hours. A quantity of the paste, when spread over grease spots on saddle leather, etc., and allowed to dry for two or three hours, can easily be stripped off, leaving the leather free from grease. The bisulphide of carbon does not injuriously affect the color of the leather.

The Cockshutt Plough Co. at Brantford are putting \$5,000 more improvements on their works.

Mr. J. G. James, of Courtright, formerly hardware merchant of Belmont, is said to have fallen heir to an English legacy of \$30,000.

The name of the Electrical Supply Co. of Hamilton, Limited, has been changed to the Electrical Power and Manufacturing Co. of Hamilton, Limited.

Mowat & Co., who keep a departmental store at Napanee, are offering to compromise at 35c. on the dollar. Liabilities are said to be \$30,000; assets, \$20,000.

The Assessment Commissioners of London have prepared a table of the population of the city, which shows a net increase of 1,153 in population since the assessors last went their rounds.

A circular has been issued by the secretary of the Halifax Electric Railway Co. calling a meeting of the shareholders for Oct. 22 to discuss the advisability of increasing the capital of the company from \$600,000 to \$800,000.

"If I were in your shoes," said Mrs. D—, "I would—" "Hold on, right there," interrupted Mrs. B—, "let us not go beyond the realm of possibilities." Three seconds later the front door went shut with a loud bang!

The council of the Board of Trade, Kingston, has offered to recommend the City Council to grant a site exempted from taxation to the Wortman & Ward Manufacturing Company, London, Ont., provided it will move its business to Kingston.

The greatest and strongest chain ever made has but recently left the Tipton Green Iron Works, in England. It is intended for crane work at Chatham wharf, and consists of oval links forged severally of 3½ inch rods, each link being 20 inches long and 13 wide. Since there was no machinery available for testing a chain of such dimensions, the test was made by actual suspension of a weight of 400 tons, or 896,000 pounds, from each link.

The C.P.R. have added to their western division an automatic compound engine,

which embraces all the best features of the highest class modern locomotives. It was built in the Montreal shops from the design of Mr. Atkinson, and contains high and low pressure cylinders, which can be used independently. Fifty laden cars can be easily drawn by the engine. The engine has ten wheels, is equipped with the Belpare fire box and the most improved system of brake.

DIAGONAL JOINTS FOR BOILERS.

A recent number of The Locomotive contains an interesting article upon diagonal joints for steam boilers, with a study of their strength as compared with longitudinal and circumferential seams. The writer closes as follows: "There is still much to be learned about diagonal joints. We need tests of them, made on a large scale, so that we may know exactly how the plates will behave under the oblique stresses to which they are subjected. The only published experimental data that we recall at the present writing are those relating to a test made in England, about 25 years ago, by Mr. Kirkaldy. He made up two single-riveted joints of iron plate, .38 inch thick, and having a tensile strength (with the grain) of 39,380 pounds per square inch. One of these was an ordinary square joint with six 3-16 inch rivets, pitched two inches from centre to centre. The other was a similar joint, except that it contained eight rivets, and was inclined at an angle of 45 degrees to the direction in which the stress was applied. In the tests the square joint gave an efficiency of 48 per cent., while the diagonal joint gave an efficiency of 64 per cent. In other words, the tests showed that the diagonal joint was stronger than the square one in the proportion of 64 to 48; that is, it was 1.33 times as strong. Our table indicates 1.27 as the theoretical ratio in this case. This is as good an agreement as could be expected; but more extensive data would be very acceptable."

GERMAN PIG IRON PRODUCTION.

The German Ironmasters Association has just published its returns of the output of pig iron in Germany, including Luxemburg, during the month of June. It shows a total production of 542,303 tons, as against 579,613 tons in May, and 515,131 tons in June, 1896. Comparing the first six months of 1897 with the same period of last year, there is an increase of 246,010 tons, the totals being 3,341,815 and 3,095,805 tons respectively. The following are the details:

	June Tons.	Six months. Tons.
Forge pig and spiegeleisen	139,605	829,207
Bessemer pig	40,706	280,763
Thomas pig	274,475	1,703,886
Foundry pig	87,517	527,959
Total, 1897	542,303	3,341,815
Total, 1896	515,131	3,095,805

MINERALS OF NEWFOUNDLAND.

FIVE years after Columbus discovered America, and more than 100 years before the Mayflower dropped its anchor at Plymouth, John Cabot landed upon the island of Newfoundland and took possession of the same in the name of Henry VII of England. Though this gives Newfoundland the precedence by many years of any English-speaking colony in the Western Hemisphere, the native resources of the 42,000 square miles comprising its total area have been searched for or developed only in a fragmentary fashion. In a paper read by A. E. Outerbridge at a meeting in the Franklin Institute some interesting data was given as to the undeveloped mineral wealth of the island. Iron, copper, nickel, plumbago, manganese, mica, asbestos, coal, granites and marbles of all shades and colors, petroleum, etc., are all garnered in the subterranean storehouses of the island usually associated with fogs and codfish. A copper mine was opened at Shoal Bay in 1778. The export of copper in the form of ingots, regulus and green ore for the fiscal year ending June 30, 1896, was 64,672 tons. Iron ores have been mined for several years at Bell Isle, Conception Bay. The Year Book for 1897 shows that the export of iron pyrites increased from 410 tons in 1887 to 36,496 tons in 1896. The cinder refuse from Newfoundland pyrites, known as "blue billy," commands a higher price than any similar cinder from any other source, being a valuable by-product, used in the manufacture of steel. Nickel was worked in a primitive fashion at the Union Mine, Tilt Cove, until the fall in the price of nickel rendered the operations unprofitable. Coal in workable seams has been found at St. George's Bay, and on the line of the new Governmental railway to be opened this autumn. Galena (87 per cent. lead) is found at Trinity Bay. Specimens from other localities have been reported as yielding 159 ounces of silver per ton. Silver mining has never been carried on to any extent, though early historical records show that silver was known to exist. Mr. Outerbridge describes the island as a natural cabinet of minerals, which may at no distant day be opened for the benefit of mankind. The Government realizes that the time has come when the great mineral wealth of the country should be developed, and is offering every facility to explorers. Newfoundland with its rock-bound shores scarcely scratched, has given the world thousands of tons of iron pyrites, copper and lead, and when enterprise and capital go further inland, what is now but a sparsely populated country, depending largely on its fisheries for the revenue of its labor, may be a scene of mineral industry, perhaps the more permanent for having been so cautiously begun.

GLASS COLORING BY PENETRATION.

Colored glasses are generally produced by fusing oxides with the glass; the whole mass is colored. Leon Lemal colors the surface by penetration, and obtains, according to La Nature, colored patterns of striking novelty. A bit of silver salt is placed on the glass, and the glass heated up to 500 or 550° Centigrade; the excess of salt having been removed, the surface will appear of a more or less deep yellow. The depth to which the color penetrates depends upon the time, the shade upon the quantity of salt applied. In five minutes the top layer of glass, 0.17 millimetres in thickness, was colored; after an hour that thickness was doubled; in 18 hours a plate 1.6 millimetres (1-16 in.) thick was colored throughout. The color appears in both reflected and transparent light, and the yellow is said to be distinguished by a fine greenish or bluish fluorescence. Other methallic salts can be used, gold, copper, iron; silver, with a little copper, gives a red. The process is exceedingly simple. To transfer a lace pattern upon glass, it suffices to dip the lace into very diluted solution of nitrate of silver and then into potassium sulphide. Photographic collodion negatives can be directly applied to the surface.

A NEW STEEL PROCESS.

One of the evening papers announces that a process of casting steel in vacuo has been patented by Mr. W. Ellis-May, and states that the results of the process are extremely satisfactory. As to the modus operandi it says: "The castings are made in an air-tight chamber, from which the air is exhausted, the mould or casting being placed in the chamber before the exhaustion of the air. A series of other chambers surrounds this chamber, each connected with it by a pipe controlled by valves. In these chambers a reserve of vacuum is stored, the air from them being exhausted by powerful vacuum-pumps. When a casting is ready to be run in, the controlling valves are opened, and the residue of air in the casting-chamber is instantaneously sucked out into the surrounding chambers at the same moment that the molten steel is poured into the mould. The casting thus takes place in vacuo; the secluded air and gases rush out of the fluid metal and diffuse themselves in the vacuum-chambers, and a flawless, homogeneous steel casting is the result." British firms are said to be doubtful about the process, whereas a big German concern has already set about constructing plant for adopting it.—Ironmonger.

The London Oil Co., Limited, has been incorporated with a capital of \$3,000 in \$50 shares.

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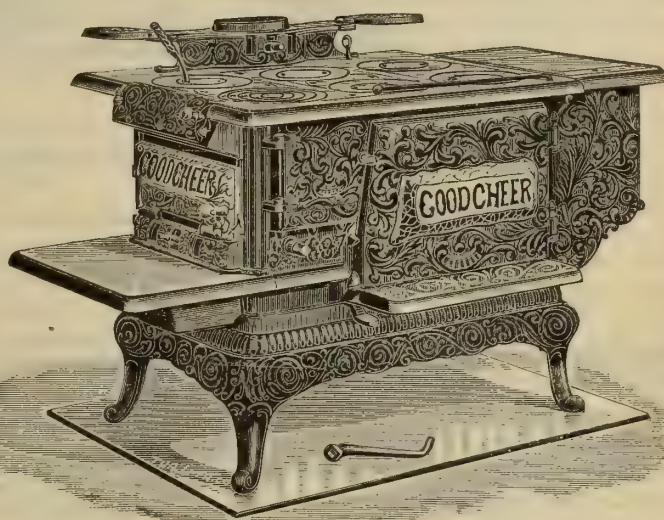
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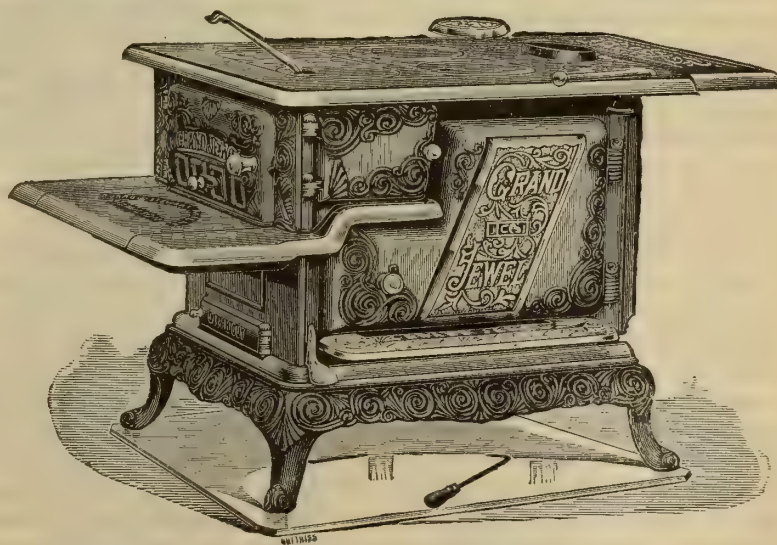
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A NEW STEEL CASTING PROCESS.

MANY of the failures of cast steel apparatus, often involving heavy loss of life, are due to what are called "flaws," and an invention of a new process has been brought to the notice of Iron and Steel Trades' Journal which the inventor, Mr. W. Ellis-May, claims will entirely remove this difficulty. The drooping of big guns, the bursting of smaller ones, the fractures of engine cranks, railway wheels and propeller shafts, are more often due to hidden flaws in the steel than to any other cause, and their avoidance is one of the most vital problems with which an engineer or manufacturer is confronted. Flaws are caused by the occlusion during casting of bubbles of air or gas which are carried down by the molten metal, and cannot escape. Their detection, in many cases, is practically impossible, this being a field in which even the Roentgen rays are not likely to be applicable in any considerable degree. It therefore becomes a matter of very great moment to devise some plan by which this occlusion of air can be absolutely prevented, and the new invention promises to do something towards this. In the Ellis-May process the castings are made in an air-tight chamber from which the air is exhausted, the mould or casting being placed in the chamber before the exhaustion of the air. A series of other chambers surrounds this chamber, each connected with it by a pipe controlled by valves. In these chambers a reserve of vacuum is stored, the air from them being exhausted by powerful vacuum pumps. When a casting is ready to be run in, the controlling valves are opened and the residue of air in the casting chamber is instantaneously sucked out into the surrounding chambers, at the same moment that the molten steel is poured into the mould. The casting thus takes place in vacuo; the secluded air and gases rush out of the fluid metal and diffuse themselves in the vacuum chambers, and a flawless homogeneous steel casting is the result. In the case of large ingots or armor plates, the process provides additionally for subjecting the fluid metal to uniform compression by means of hydraulic power while in vacuo, so that cavities which might result from contraction of the metal while cooling will be rendered impossible. It is usual at present, when making large castings, to use about 40 per cent. more metal than is required for the work, because the upper part of the ingot, being permeated with air and gas bubbles, has to be cut off and discarded as useless. By the Ellis-May process it is claimed that this waste will be avoided.

Whatever may prove to be the practical value of this method of casting steel, it is, we believe, says Iron and Steel Trades'

Journal, a rational attempt to solve a great difficulty; yet we are informed that most British steel manufacturers who have been approached with it have turned the same cold shoulder on the inventor that they did to the inventor of the "Harvey process." One of the largest continental steel-makers, on the contrary, has taken up the invention at once, has already carried out the preliminary laboratory experiments, which are pronounced to have been successful, and is now constructing plant to test it on a commercial scale. It is not too much to say that if the Ellis-May casting process proves a success on a commercial scale, it will tend to effect a revolution in the steel casting industry.

IRON-MAKING COUNTRIES OF THE FUTURE.

The iron-making countries of the past, says the Iron and Coal Trades' Review, have been India, Russia, Sweden, Spain, the North American colonies and Great Britain. Between 1840 and 1882 Great Britain had three-fourths of the world's iron trade. Since 1812 Germany and the United States have made such rapid progress that we now only average about a third of the trade of the three countries, although during last year we are likely to have averaged more than that proportion.

The other iron-making countries in the order of their importance are France, Russia, Austria-Hungary, Sweden, Belgium, Spain and Canada. Practically, it may be said that India, the countries of South and Central America, our Australasian colonies, China, Japan and the countries of South and Central Africa, have not as yet entered the lists, although small quantities of iron are produced in some of them, as in India.

Put in another way, it is about correct to say that up to the present time Asia, Africa and Australia stand outside the pale of iron-making industries, and that more than one-half of the American continent is in the same position.

This condition of things cannot be expected always to continue, seeing that most of these countries are possessed of iron-making resources, some of them of practically unlimited extent. Already, indeed, China and Japan have taken the bull by the horns. The Chinese have erected large works at Hankow, and the Japanese are about to expend half a million sterling on large works destined to make their own railway and ship-building material.

TEN-YEAR-OLD.

It is said that on a recent trip of one of the regular ocean liners to Montreal there was so much old vatted "Scotch" consumed by passengers returning from the Jubilee

that the vessel following never took an observation during the whole of the passage across the Atlantic. She merely followed in the track of the preceding vessel, being guided solely by the "dead soldiers" (empty bottles) which glided past.

COKE VERSUS COAL.

When the late Senator Coke, of Texas, started in public life as a candidate for a small office he found himself opposed by a young man named Cole. The latter was an eloquent speaker, and seemed to be having the best of the campaign for that reason. To offset this the friends of young Coke prepared a big barbecue, and made arrangements for a speech by a man who at that time was the most popular orator in Texas. When the day arrived for the barbecue, the great orator telegraphed that he could not come, and therefore they would have to get some one else.

This was a hard blow to the Coke people, and when they cast about for a speaker the best they could do was to bring out a rough-and-tumble sort of fellow who had been a coal miner in Virginia, with some local reputation as a wit. The committee who hired him were in fear and trembling, wondering how it would turn out. But they were not in anxious suspense long, for his first sentences caught the crowd and turned the tide in favor of their candidate. Mounting the platform for the occasion, he began:

"Feller citizens, I am here to-day to talk to you about Coke and Cole. You know me, and you know what I am talking about. I want to ask you if you know the difference between Coke and Cole? But it ain't necessary. Every man of you knows that the difference between them is the gas that is in the Cole."

It need hardly be added that young Coke was elected by a big majority. And from that on his election to every office was by a big majority, carrying Texas the first time for Governor by 50,000, and the second time by 102,000.—Stoves and Hardware Reporter.

PROTECTION FOR CYCLISTS.

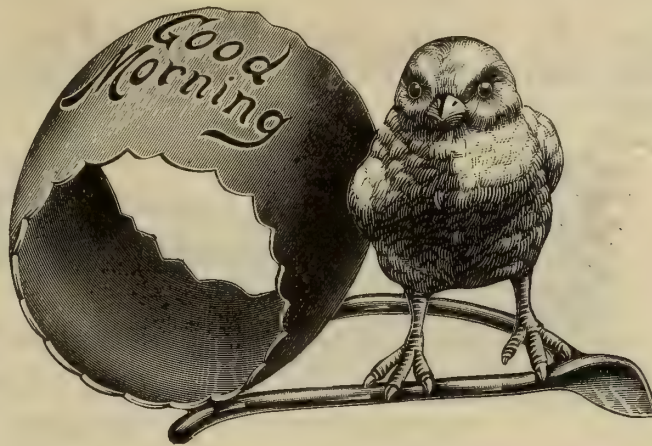
The Iver Johnson's Arms and Cycle Works, of Fitchburg, Mass., makers of the famous "Iver Johnson" cycles, are also large manufacturers of fine firearms. Amongst their later patterns is a small revolver of the automatic style, with a short 2-inch barrel. This is a five-shot revolver, and on account of its small size may be easily carried in the pocket, and affords protection alike against vicious dogs and the highwayman, and is designed expressly for use of the cyclist.

SUDDEN COOLING OF NEARLY PURE IRON.

Prof. Arnold, in discussing the influence of sudden cooling on nearly pure iron, attacks the allotropic theory of iron advanced by Prof. Howe, and shows that the experiments on which it is based, admittedly erroneous to some extent, would not justify the conclusions drawn from them. This allotropic theory briefly stated claims that when nearly pure carbonless iron is heated to about 1,600 deg. F., it assumes an allotropic form possessing a tenacity far greater than ordinary iron, and this property is nearly all retained when the metal is suddenly quenched.

Prof. Arnold goes on to give the methods of Prof. Howe for obtaining data on which he based his theory, and points out what he thinks is a weakness in the chain of reasoning. He finds that the break at a point in the curve of recalcence of a steel was not proved to be accompanied by a corresponding break in the curve based on the physical strength and the various quenching temperatures. This Prof. Arnold considers the crucial test of the whole theory, and to examine the point he melts Swedish bar iron in a crucible, casts a 50-lb. ingot which was then hammered and rolled to a $\frac{5}{8}$ -inch round rod. From this the test pieces were prepared.

The material when analyzed had but 0.22 per cent. impurities, of which carbon was 0.07. The test pieces had a cross section of 0.1 square inch, had both ends recessed, one for the reception of a thermocouple of the Le Chatelier pyrometer, and the other for the introduction of the holding bar, which enabled the operator to rapidly quench the test piece when the desired temperature was reached. All bars were heated to 1,800 degrees F., allowed to cool to the desired temperature, being then at once plunged into iced brine. The heating and cooling was conducted in an atmosphere of pure nitrogen, preventing all scaling of the metal and leaving it almost as well polished after quenching as it was before heating. Tensile tests were now made and curves constructed which seemed to warrant the conclusion that "the increasing tenacity as the temperature of quenching runs up is a measure of crystalline stresses, internal and external. When these stresses are counterbalanced by the flow of metal preceding rupture, the mass resumes its normal ductility as measured by the reduction in area." Prof. Arnold would then seem to conclude that there is nothing in the theory of an allotropic state of iron, but that the phenomena observed are entirely of a nature compatible with a single state of existence of the element iron.—Engineering.



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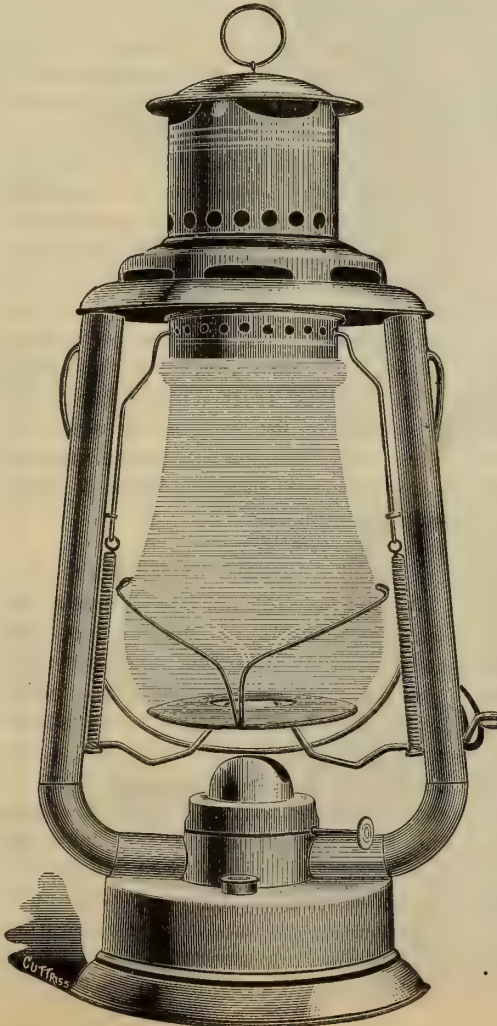
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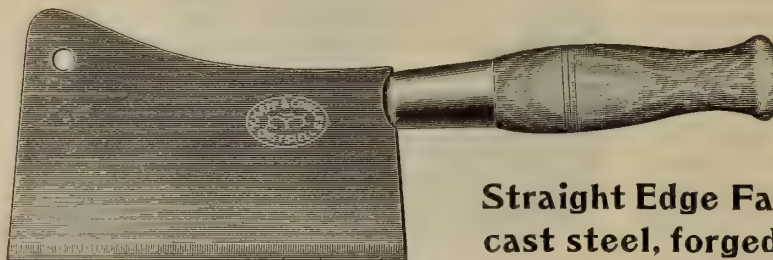
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WATCHING QUOTATIONS.

THERE is one feature of the retail hardware business which, while it is seldom neglected entirely, does not always receive the attention it deserves, says Stoves and Hardware Reporter. This is the matter of prices and discounts. They need constant watching and occasional revision. In fact, this revision is more likely to be necessary from now on than has been the case for several years, since prices are certainly on the verge of changing now and when the markets are active the variations in quotations are often pronounced, as is now the case with wire nails. In consequence, a closer attention to jobbing figures is requisite than when they have been in the ruts of slow movement in sales. There are some hardware quotations and discounts that do not change for months, while others are liable to be raised or lowered over night. It is these latter goods that require a very close watching in the matter of price.

Another subject of a somewhat similar character will also most probably require a more careful consideration than hitherto. If jobbing prices sixty days from now are higher than those in force when the retail stock is bought, shall the retail selling price be advanced in proportion, or should the dealer be satisfied with the first profit? Most dealers will answer that alternative question by making up their goods every time the jobbing price is advanced, and while this may be a good general policy, it is yet apt to meet with some exceptions. Prices will not advance materially unless there is a very active market, and, under this condition, even when ordinarily favorable, the market prices are liable to change at any time. Then, if the dealer has marked up his goods and follows his policy consistently, he will naturally mark down and give rise to the suspicion that he is running "an auction shop." It is true that breaks in the market are not to be expected for some time, yet there is nothing certain about it and even price-makers can not

always tell what is about to happen. A conservative policy in making or changing prices is always the safest. It should not be forgotten, however, that the buying public are very close watchers of the markets nowadays, and that the opportunities for obtaining information are not always restricted to the dealers.

OLD BUT TIMELY.

The buying of new goods this fall brings up again the old question of window dressing. A St. Louis merchant has adopted an idea that draws the crowds because it appeals to what is now a popular fad. He calls it "A Glimpse into the Youkon." It is merely an exhibition of a supposed scene of a miner's camp, with lay figures dressed in the garb of prospectors. The camp-fire is there, or the display would lose its meaning, but there is also a sheet-iron stove for heating, a camping outfit for cooking and all the necessary articles for use under such conditions, while displayed about the window are such other articles as a miner could possibly need. The presented picture may be somewhat overdrawn, but not sufficiently so to spoil the effect. It certainly draws the crowd to the front of the store, and when that is done the first part of the effort has been accomplished.—Stoves & Hardware Reporter.

SHEET-IRON CURIOSITY.

An Austrian firm, the Rudolfschuetzte, produces sheet-iron one hundred feet long, while other works, it is alleged, have never gone beyond the length of forty feet. Lately, an English firm has made a contract with these works for a large quantity of this sheet-iron, and, on being asked what use the long sheets were put to, explained that they were sent to Australia. There they are rolled and soldered, and are used for transportable aqueducts, which are removed when the drought ceases. The English firm has asked for still thinner sheet-iron, and the Rudolfschuetzte is trying to produce it.

ALUMINUM POSSIBILITIES.

IF the statements of a St. Louis projector are to be accepted at their full value, the cost of manufacturing aluminum will soon be reduced to the neighborhood of ten cents a pound, or even lower. This same projector is authority for the statement that the present cost is not too high on the basis of actual expense in manufacturing, with royalty on patents included, but he adds that recent discoveries in processes will astonish the world in the matter of cost and that aluminum will soon be recognized as a standard metal which will grow in use in equal proportion with the lowering cost.

Aluminum now sells at the rate of \$700 a ton, or thirty-five cents a pound. On this basis it has had a wide sale, for different purposes. It now goes into the manufacture of cooking utensils, builders' hardware, car and other trimmings, light goods of various descriptions and various articles of commercial importance. It has been used in bicycles and wagon bodies, while one of its latest achievements is in furnishing material for guns, both for warlike and sporting purposes. The lightness and strength of the metal are the main considerations and these seem to have been satisfactorily met.

The main point, however, is that of cost. Aluminum was once a rare metal and had no practical adaptation because of the expense in manufacturing. Science has now conquered the difficulty and promises to make still farther inroads on the hitherto impossible. In bulk, and considering the relative prices, the metal is a close competitor with copper and its compounds. If the price is reduced, as it is claimed it will be, aluminum may not only make this competition of advantage to itself, but may enter a field that is now occupied entirely by steel. Its growing use and adaptability, together with the reduction in cost, are somewhat striking illustrations of the metal's possibilities. Its conjunction with steel in manufactures is also a strong argument in its behalf.—Stoves and Hardware Reporter.

THE DISCOVERY OF PLATINUM.

THE story of the discovery and development of platinum is one of more than ordinary interest, says an exchange. Mere traces of platinum are found in almost all native gold. As early as the first half of the sixteenth century it was noticed that the gold ore in the Spanish mines of Darien included grains of a white metal endowed with the qualities of a noble metal, and yet distinctly different from silver. This interesting fact remained unknown in Europe, however, because the Spanish Government found that the new metal lent itself most admirably to the adulteration of gold, and prohibited its exportation. It was only at about the middle of the last century that the metal began to find its way to Europe and to become known there, at first as a curiosity, under its Spanish name of "platina del Pinto"—"the little silver from the river Pinto." The chemists gave their attention to it, but an amateur, Count Von Sickengen, it appears, was the first who succeeded in working it. This was in 1772; the first platinum crucible was produced by Achard in 1784. In 1828 an

account of a superior method of working platinum was published by Wollaston, who had already wrought it as a rich source of revenue for years.

Pure, compact platinum is a tin-white metal, about as soft as pure copper and having nearly, but not quite, the plasticity of gold. It is not changed by air, water or steam at any temperature, and is proof against the action of all ordinary single acids, even including hydrofluoric. It has been used since 1784 for crucibles, being superior to porcelain, and although the first cost is great, being found cheaper in the end than glass. The rapid development of applied electricity has greatly broadened its field of usefulness, and hence the increased interest in the production and cost of the metal. The ore, as above stated, was first found in South America and is found there chiefly in the provinces of Chocos and Barbacos, United States of Columbia. It is also found in Brazil, in San Domingo, in California, at the Rogue river in Oregon, in Canada and in the island of Borneo, but the chief supply comes, as shown by the report of the Russian Minister of Finance,

from the Ural mountains—forty times the entire production of all other regions taken together.

BRITAIN'S EXPORT IRON TRADE.

One of the most remarkable features of the export iron trade of Great Britain for the present year, remarks an exchange, has been the large increase of exports to countries that are themselves distinguished as iron-producing countries, and with which that country comes more or less into competition in neutral markets. The following short table brings out this feature of recent exports in a striking light:

To—	Exports for the first seven months of	
	1897. Tons.	1896. Tons.
Germany	251,940	209,044
France	53,343	31,295
Belgium	86,880	35,313
Russia	93,195	60,401
Totals	485,358	336,053

An increase of 44 per cent., which is considered a phenomenal advance. The increase has mostly taken place in pig iron, which is produced more cheaply than in other countries, and it is likely that some at least of the exported pig iron was returned in finished form.

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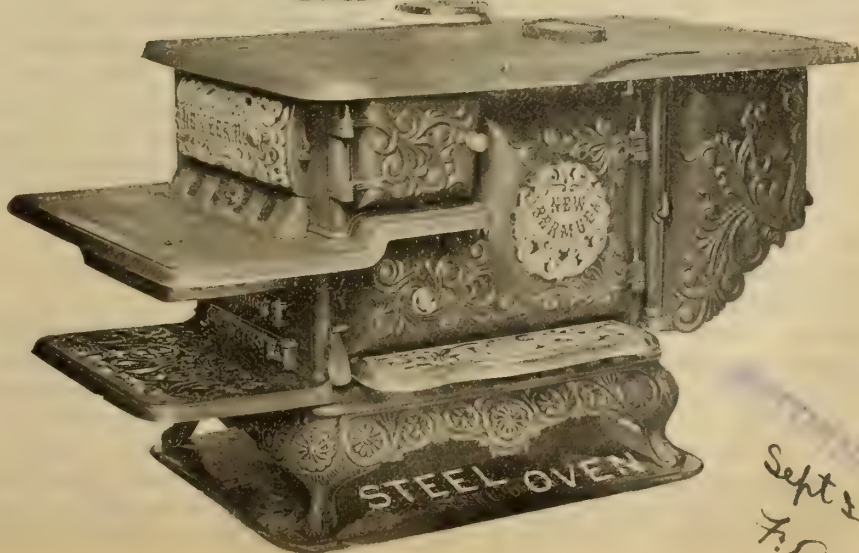
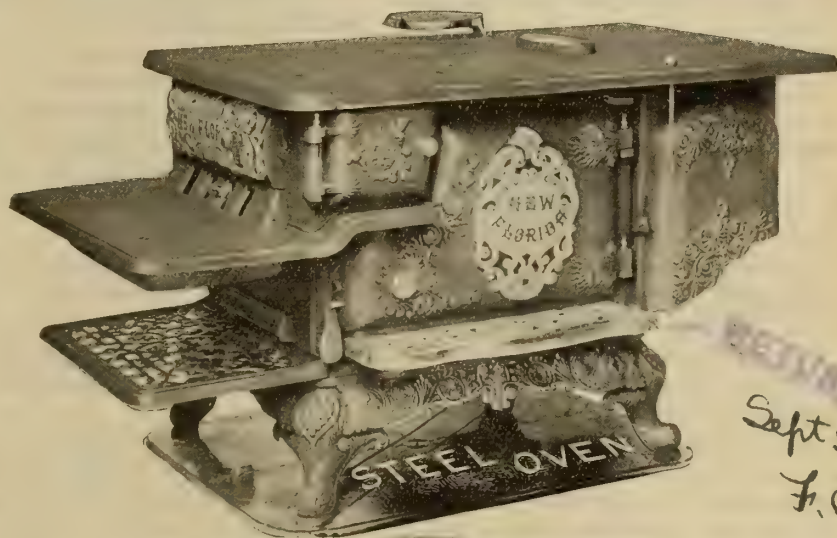
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Limited

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Watch for our Double Heater, TODD.



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BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

GILBERT MCINTYRE, general merchant, Wingham, Ont., has assigned to R. G. Hector, Toronto. A meeting of creditors is called for the 28th inst. in Toronto.

L. Nadelman, general merchant, Steveston, B.C., has assigned.

Etienne Robert, contractor, Montreal, is offering to compromise at 75c. on the dollar.

James Cameron, general merchant, Spring Hill, Que., has assigned.

A. G. Lang, general merchant, Hespeler, Ont., has assigned to H. Hawthorn.

Joseph Letang, general dealer, Killaloe, Ont., has assigned to Thomas W. McGarry.

Joseph Bourgeois, general storekeeper, Ste. Angele de Laval, Que., has assigned.

W. R. Lementine, general merchant, Southampton, N.B., has been closed up by the sheriff.

W. G. Smith, harness dealer, South Woodslee, Ont., has assigned to W. T. Cummingford.

A meeting of creditors of Joseph Gill, bricklayer, Toronto Junction, is to be held on October 1.

Paradis & Jobin have been appointed curators of the general business of Alfred Duchaine, Roberval, Que.

Lefaive and Taschereau have been appointed curators of the general business of Jules Parent, Beauport, Que.

W. R. Lementine, general merchant, Southampton, N.B., is offering to compromise at 30c. on the dollar.

A meeting of the creditors of Tremblay & Larouche, general merchants, Mille Vaches, Que., was called for the 22nd inst.

A meeting of the creditors of R. J. Latimer, dealer in carriages and implements, Montreal, has been called for the 25th inst.

Two demands of assignment have been filed against Jos. Bourgeois, general merchant, Doucet's Landing, Que.; one by A. Lesperance & Cie., and the other by Carter, Galbraith & Co.

PARTNERSHIPS FORMED AND DISSOLVED.

Bouchard & Dion, carriage makers, Montreal, have dissolved.

Paradis & Gingras, general merchants, Etchemin, Que., have dissolved partnership.

Brown & Withers, bicycle dealers, Toronto, have dissolved partnership. F. H. Brown continues.

Thomas Pringle & Son, engineers, etc., Montreal, have dissolved. David A. Pringle is now registered sole proprietor.

Joseph and Vincent O'Toole have formed a partnership in Louisburg, N.S., to trade as general merchants under the style of P. O'Toole & Sons.

Joseph E. Lalonde and L. Evariste Malette have formed a partnership in Point

Fortune, Que., to do a general business under the style of Lalonde & Malette.

Edouard Dubois and Marcién Dubois have formed a partnership in Montreal to carry on a business as painters under the style of Dubois Freres.

Horace and Alexandre Chagnon, Montreal, have formed a partnership to trade as sash and door manufacturers under the style of Chagnon & Frere.

SALES MADE AND PENDING.

The general stock of Moise Menard, Ste. Justine de Newton, Que., has been sold.

The stock of the estate of Phidyme Hunt, grocer, Que., has been sold at 77c. on the dollar.

The stock of bicycles, etc., of E. W. Matthews & Co., Montreal, is advertised for sale by tender.

The assets of Alexander & Lefebvre, bicycle merchants, Montreal, were sold at auction on the 23rd inst.

CHANGES.

W. Battel, Oil City, Ont., is closing up his general business.

J. C. Edwards, general merchant, Trail, B.C., is out of business.

G. Silvester, Elkhorn, Man., is opening out a hardware business.

Horton Bros., Silverton, B. C., have ceased their general business.

John S. Trites, general merchant, Sussex, N.B., has sold out to George H. White.

Joseph Prescott, Baieverte, N.B., has sold his general business to R. C. Goodwin.

Thomas Hill, general merchant, Flesher-ton, Ont., is about removing to Russell, Man.

J. M. Chisholm, general merchant, Lion's Head, Ont., is to be succeeded by R. Dealy on 1st prox.

Jane E. Mann, wife of John W. Short, is proprietress of the general business now carried on in Montreal South, under the style of Jane E. Short.

The stock of the estate of L. Gullivan, hardware merchant, Middleton, N.S. has been sold to Lorne L. Gullivan.

The Electrical Supply Co. of Hamilton, Limited, has changed its style to The Electrical Power and Manufacturing Co. of Hamilton, Limited.

FIRES.

The Empire Oil Co., London, has sustained loss by fire.

Cyrille Fortier, general merchant, Lake Megantic, Que., has been burned out.

J. W. Hetherington, general merchant, Teeterville, Ont., has been burned out.

Joseph O. St. Laurent, tinsmith, Lake Megantic, Que., has been burned out.

L. E. Sevigny, carpenter, Lake Megantic, Que., has sustained damage by fire.

The Hull (Que.) Lumber Co. has had one of its mills burnt. Insured.

The foundry of Terrean & Racine, Quebec, was partially destroyed by fire. No insurance.

The premises of Lewis Meyers, dealer in bicycles, etc., Montreal, have been damaged by fire.

DEATHS.

Martin Somers, blacksmith, Antigonish, N.S., is dead.

David Miskelly, tinsmith, Smith's Falls, Ont., is dead.

T. J. McManus, general merchant, Bathurst, N.B., is dead.

G. H. Falconer, general merchant, Streetsville, Ont., is dead.

G. A. Crathorne, of the Dartmouth (N.S.) Rolling Mills Co., is dead.

RIBBED WINDOW GLASS.

RIBBED window glass has been largely adopted in America, and is now making its way across the Atlantic, according to a contemporary. It has many advantages over the old plain, clear window glass, though probably it will be long before the latter is entirely superseded. In the case of ordinary glass, the direction of the light entering the window—whether in bright or cloudy weather—is always downward at an angle of 40 or 50 degrees. The brightest portion of the room is thus the floor directly in front of the window; and as the floor is not, as a rule, a very efficient reflector, a large amount of the light is absorbed by it and lost. Early in the morning, and towards the evening, the angle of incidental light with the horizon is less, therefore the light penetrates into the room; but the wall spaces between the windows get very little of it. When ribbed glass is substituted for plain glass, the bright spot on the floor in front of the window disappears, and the entire walls and ceiling appear of the same brilliancy. This is due to the fact that the action of ribbed glass is somewhat prismatic, the greater part of the light being reflected and spread out into a fan shaped beam, which lies in a plane almost perpendicular to that of the glass and the direction of the ribs. The effect of having the ribs horizontal is to give an increase of light in the middle of the room and a decrease at the sides, whereas the vertical ribs give an increase at the sides and a decrease at the centre. The diffusion of heat is effected in the same way, there being a point where the heat rays stream directly in when ribbed glass is used. Thus it is cooler than the plain glass by from 4 to 15 degrees Fahr., according to the brightness and power of the sun. Ribbed glass, however, is itself hotter than the plain glass; and the temperature of the air, therefore, becomes much about the same in both cases.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means; that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

LARGEST CRANE.

ABSOLUTELY the greatest mechanical giant in the world is now lifting stone on a new sea wall on the north coast of Scotland. Not even the monster cranes used for lifting the governmental great guns can compare with this Titan, as it is called, says a contemporary. It is capable of lifting 100 tons, and it could pick up a modern locomotive with as much ease as the same locomotive draws a train of cars. It could lift the cubic contents of 100 car-loads and strew them over a wide section of the landscape. Its daily work is the placing in position of fifty-ton blocks of granite, of which the new wall at Peterhead is being built.

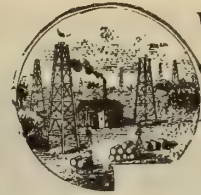
The length of its arms, reaching out from the central point of support, is exactly 100 feet, and it can set a sixty-ton block in the sea 100 feet deep and seventy-two feet from the outer edge of the masonry wall. This long arm is balanced by a shorter-weight arm that carries the engine house, with the machinery for moving the Titan forward or backward on a railroad set into the finished masonry, and to run out or in on the long arm a traveling car from which are suspended the four-sheaved blocks through which is received the cable that lifts the great pieces of stone. The Titan itself weighs 700 tons and is built of steel. The long arm swings about on a turntable, just as a bridge swings over a river. The wall which it builds and then travels over as it slowly advances into the sea is nearly fifty feet wide.

CASUAL CUSTOMERS' ADDRESS BOOK.

We are indebted to Mr. A. W. Thompson of Newport, Mon., for an excellent suggestion, which, whilst not absolutely novel, is none the less a plan not followed as a general rule. His central idea is to catch the casual customer—a stiff job, but not outside the range of possibility. A book is suggested for recording all addresses and other important particulars, as they can be hastily obtained by the observant assistant. Mr. Thompson maps out his book something like this:

NAME.	ADDRESS.	REMARKS.
Alexander Sharp	Woodvale	Stores man—quote low cash prices.
Jas. Wood	Newtown	Builder—quote delivered at P. & P.'s prices.
Colonel Hunt	Moortown	Sportsman—send everything best quality.
Mrs. Marsh	Sea View	Lodging House—Season, August. Call then. Likes enamelled ware.

The book should be a small one, with index, half-a-dozen or more pages being allocated to each letter.—Hardwareman.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

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BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

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IRON FENCING

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Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works

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ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

TO PROCURE HARMONY.

AN illustration of the harmony that should exist between master plumbers and supply houses is to be seen in the relations between these two parties in the Southern States. Not long ago friction did exist, but both have recognized the advisability of having the other party's confidence, have bent slightly in their determination to have their wishes, and the result has been that resolutions of an amicable nature have been passed by the Southern League of Master Plumbers.

This goes to prove that it is no impossibility to have plain understandings between plumbers and supply houses. At present the Executive of the Canadian National Master Plumbers' Association has under consideration grievances of some of the plumbers of the association, who have been complaining that certain supply houses sold goods to private individuals which, by the agreements of two classes, they were not permitted to dispose of to others than plumbers. It is to be hoped that these troubles will be smoothed over and that friction will be less frequent. There is no reason why affairs should not run smoothly when each has its own advantages to derive from the good-will of the other.

The jobbers and manufacturers of plumbers' supplies in the United States who send representatives or supplies into southern territory have recognized in the Southern League of Master Plumbers a movement, one of the objects of which is to build up the commercial credit of its members and thus reduce the risk of selling goods within its jurisdiction as well as for moral encouragement and support. In the remarkable Montgomery incident, when master plumbers were contending openly and honorably with the municipal government for their rights against public ignorance and injustice, the supply houses of the country nobly supported the Southern League of Master Plumbers represented by the Montgomery local association, notwithstanding that the Baltimore resolutions gave them the right to negotiate with municipalities for the sale of supplies.

In return for this kindness and evidence of good will, the association pledged itself to keep its members on a sound financial

basis, and thus prevent losses to the supply houses, by passing the following resolution:

Resolved, That the only bar to membership in the Southern League of Master Plumbers, not otherwise ordered in the national constitution and bylaws, shall be persistent and wilful failure or refusal to pay just debts past due, that those of our members now in arrears with the supply houses for accounts long past due be notified that they must make satisfactory arrangements with their creditors during the fiscal year 1895, under penalty of being dropped from the league rolls, should they fail or refuse to settle or make satisfactory explanation, that the Southern League of Master Plumbers will not tolerate or support members whose names are black-listed throughout the union.

The association, recognizing the power of the supply houses, also passed this resolution:

Resolved, That the jobbers and manufacturers in plumbers' supplies be requested to use their influence in assisting us to build up and hold the membership of our state associations, that they be asked to write kindly letters to our wavering supporters, non-members and all new firms which may hereafter enter the business, to help us convince such firms or individuals, if possible, that their best interest lies within our local, state, league and national associations, to use their influence with us to convince firms wavering between the retail and plumbers' supply business, to adopt either the one, as signers of the Baltimore resolutions, or the other, as members of the nearest local association, when so requested by the executive office of the league.

Thus, this association of plumbers and the manufacturers are taking steps to procure harmony. Thus, mutual advantages are provided, and after the rules have been in force for a little while each party will have come to the determination that it cannot get along without concerted action on the part of the other as well as on the part of the members of its own trade.

TEMPERATURE TO IGNITE WOOD.

A correspondent asks for information regarding the temperature to ignite wood, the point in question being the liability of steam pipes to cause ignition of wood with which they come in contact. This is a question largely of time. It takes a very high temperature to ignite wood immediately, as when it is set on fire by contact with flame. A temperature of from 400 to 600 degs. F. is required to char wood within a reasonably short time, and these temperatures are above those of ordinary steam. It is a frequently observed fact, however, that wooden lagging applied to steam pipes and engine cylinders becomes charred after a long exposure to heat, even at the lower temperatures.

A. L. Stevenson, in a paper read before the Federated Institute of Mining Engineers, quotes Dr. Percy as saying that the

lower the temperature at which charcoal is produced the greater its power of absorption, and Engineering as saying that "It is well known that the ignition point of charcoal bears a certain ratio to the temperature of carbonization, the lower the temperature the more readily combustible the charcoal." It appears, then, that wood will by the long continued application of heat become charred at temperatures below those given as the points of carbonization by the authorities, and that the charred wood or charcoal thus produced is particularly liable to spontaneous ignition by the absorption of oxygen.

—Power.

FLOW OF WATER THROUGH 2-INCH PIPE.

A correspondent of Metal Worker asked: "Can you tell us through the Letter Box how much water would be discharged through a 2-inch pipe five miles in length, with a fall of about 400 feet in the five miles? We want to lay a 2-inch pipe down a river which has many crooks and bends, and the piping would not run straight and would have to run over some obstructions at the lower part which are about 20 feet high."

The answer was as follows: "The theoretical flow of the pipe should be 24 gallons per minute. The laying of the pipe in long curves following the bends in the stream will make but little difference in the quantity. Make long bends and avoid elbows. The obstructions will not affect the flow, and if there is no more than five miles of pipe in the line a flow of at least 20 gallons per minute can be relied on. In laying the pipe every piece should be examined, either by looking through it or passing a rod with a knob slightly smaller than the pipe to detect obstructions or blisters which will materially obstruct the flow. Such pipe should never be used in a pipe line."

PLUMBING CONTRACTS.

Purdy, Mansell & Mashinter, Toronto, have the contract for the heating and plumbing of S. F. McKinnon's building, York street.

The Bennett & Wright Co., Limited, Toronto, have secured the contract for the heating and ventilating of the new Lawlor building, corner King and Yonge streets.

Hardware Dealers Magazine

JUNE, 1894.

Containing the Most Up-to-Date
 Abstracts of the
 American, Canadian, and
 European Trade Journals
 Latest News, Trade Notes
 American Trade Reports
 Canadian Trade Reports
 Market Prices and Conditions
 Shipping News
 United States Customs
 New Catalogues and Lists
 New Goods Introduced
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 Also, the following
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 and General Engineering
 and all the latest
 and most interesting
 news of the world.

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 In Best Adjustable
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 FOR PUMP AND BOLTS
 CLAIMS
 SIMPLICITY DURABILITY
 CHEAPNESS & EASY
 REPAIR

WATER GAS
AND
BRIDGEPORT, CONN.

STEAM FILTERS
TOOLS

CATALOGUES ON APPLICATION.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
 H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
 Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers,
 Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS
 GLASS GAUGE
 GASKETS, RINGS, BUMPERS.
 BOILER GASKETS

SMALL RUBBER GOODS
 MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

A NEW HEATING COMPANY.

NOTICE has been given in The Canada Gazette incorporating the Canada Heating and Ventilating Co., Limited, Toronto. The purposes for which incorporation is sought are to carry on a business of manufacturing, buying and selling of stoves, furnaces and general heating apparatus, and all goods of the hardware trade, and to carry on a business as plumbers, tinsmiths, steam and gas-fitters, etc. The intended amount of capital stock is \$25,000, divided into 250 shares of \$100 each. The applicants were John McKelvey and Samuel Birch, Kingston; J. T. Johnston, A. F. Webster, and C. W. Kerr, Toronto, of whom John McKelvey, J. T. Johnston and C. W. Kerr are the provisional directors of the company.

PLUMBING AND HEATING NOTES.

The Winnipeg Heater Co., of Toronto, Limited, has just been incorporated.

Building permits in London have been obtained by Margaret A. Fowler for the erection of a storey and a half brick east of Colborne street, to cost \$1,800; G. R. Kettle, for a \$1,800 brick residence on King street, near Maitland.

The report of the Canadian Government's commercial agent at Christiania, Norway, C. E. Sontum, shows that there is a growing demand in that country for Canadian

radiators. Mr. Sontum states that he himself has received orders for 10,000 square feet of these radiators since last April, and that there is a large amount of building going on for which more will be required.

Halsey & State have opened a plumbing establishment at 303 St. Antoine street, Montreal. Both Mr. Halsey and Mr. State have had large experience in plumbing and steam-fitting, which qualifies them for the business they are entering.

Clare Bros. & Co., of Preston, Ont., have placed a No. 170 "Marvel" coal furnace, with a heating capacity of 100,000 cubic feet, in the new Methodist church at Simcoe. The heat for the Sunday school will be furnished by a No. 152 "Marvel" combination hot water and hot air, with a capacity as large as the other.

NEW HOT WATER BOILER.

A new hot water range boiler has been put upon the market. It is named "Everlasting," and is made from seamless drawn steel tubing. It has no seams or rivets. The boiler is tested to 400 pounds, and is made in three sizes, namely, 30, 35 and 40 gallons. The price ranges from \$14 to \$21. G. C. Morrison, of Hamilton, is the maker, and the Ontario Lead and Barb Wire Co., Limited, are sole agents for Toronto and the east.

THE USE OF SHEET ZINC FOR ROOFING.

The use of sheet zinc for roofing, says an English paper, seems to be attracting a great deal of attention at the present time, owing to the extended use of this material on the continent. It is the coming roofing material in America, as in durability and cheapness it is alleged that it is far ahead of anything else. There is one strong point in favor of zinc roofing, and that is if the zinc roof should become damaged by some natural cause it may be readily sold to any zinc works for two-thirds of its first cost, which is practically out of the question with any tin, asphalt or slate roofing. Nevertheless, in the consideration of the bearing of the chemical nature of zinc upon its practical application in roofing, it is well to know and remember that the thin pellicle of hydrated carbonate of zinc which sometimes forms is easily attacked by waters containing alkaline salts and some of the soluble iron salts. Consequently, it is possible that bricks made from certain clays would be undesirable in juxtaposition with zinc sheets. In a case in Berlin some zinc sheets supported on a brick wall were corroded near the bricks, and an examination of the latter showed 1.14 per cent. of soluble salts. A little watchfulness round the mortar and brick joints, and care in increasing thickness of the sheet at such places, with perhaps the application of an asphalt metal coating, should suffice to prevent any disappointment in the future use of zinc material for roofing.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL



CURRENT MARKET QUOTATIONS

TORONTO, Sept. 24, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 00
Straits	0 16	0 00

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X.	6 25	
I.X.X.	7 50	
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Famous—

I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	
I.X.	4 25	
I.X.X.	5 00	
I.X.X.	5 75	
D.C., 12½x17	3 00	
D.X.	3 75	
D.X.X.	5 75	

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base...	3 15	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	8 00	
I.X., Orion	8 00	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs	Per lb.	
14x60,	0 05½	0 06
14x65,		

Tinned Sheets.

72x30 up to 24 gauge	0 06	0 06
26 "	0 06½	
28 "	0 07½	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	2 00	
Band	2 00	
Hoop	4 00	4 25
Sleigh Shoe Steel	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 11
Russian Sheet, per lb	0 10½	0 14
Tank Plates, 1-5 and thicker	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½-inch	0 06½	
2 "	0 07½	
2½ "	0 09½	
3 "	0 11	

Steel Boiler Plate.

½ inch	2 45	
	2 35	

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 25	2 35
26 "	2 35	2 45
28 "	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 40	
Half polished	2 45	
All bright	2 85	

Iron Pipe.

Wrought, ¼ to ¾ inch, 17c; ½ inch, 2½c;		
¾ inch, 2.75c; 1 inch, 3½c; 1¼ inch,		
1½ inch, 4.45c; 2 inch, 5½c.		
Galvanized, 60 per cent.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
16 gauge	Per lb.	
18 to 24 gauge	0 03½	
26 "	0 03½	
28 "	0 04½	

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼ "	4 75	
" 5-16 "	4 00	
" ¾ "	3 75	
" 7-16 "	3 35	
" 1½ "	3 25	
" 9-16 "	2 95	
" 5½ "	2 85	
" 3½ "	2 75	
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per doz. yards	0 13	0 50
Jack chain, double, per doz. yards	0 15	
Jack chain, brass, single, per doz. yards	0 20	10

Copper.

Ingot.

English B. S., ton lots	0 11½	0 12
Lake Superior		

Bolt or Bar.

Cut lengths, round, ½ to ¾ in.	0 20	0 22
" round and square		
1 to 2 inches	0 18	0 19

NOTE.—Complete lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
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Untinned, 14 oz., and light, 16 oz., irregular sizes

NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.

Planished and tinned, 14x48 and 14x60

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb.

35 to 45

50 lb. and above

Boiler and T. K. Pitts.

Plain Tinned, per lb

Spun, per lb

Wire.

Pure, in coils—

From 1 to 20 gauge, 12½ p.c. off list.

From 20 gauge up, 12½ p.c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c. off list.

neets, hard-rolled, 2x4 ft... 0 20

Zinc Spelter.

Foreign, per lb	0 04½	0 04½
Domestic	0 03½	0 04

Zinc Sheet.

5 cwt. casks	0 05½	
Part casks	0 05½	

Lead.

Imported Pig, per lb	0 03½	0 03½
Domestic, per lb	0 02½	
Bar, 1 lb.	0 04½	
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04½
Sheets, 3 to 6 lbs., per sq. ft., by roll.	0 04	0 04½

NOTE.—Cut sheets ½ cent per lb. extra.

Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 27½ per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half	Per lb.	Pe
Standard	0 11	0 11½
Wire	0 10½	0 11
	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb	0 08	0 08½

Anti-Friction Metal.

"Beaver" brand	\$0 20	
"Tandem" A	0 19	
B	0 16	
C	0 10½	

White Lead.

Pure, Assoc. guarantee, ground in oil,	Per cwt	
25 lb. irons	5 50	
No. 1 do	5 22½	
No. 2 do	4 75	
No. 3 do	4 37	
No. 4 do	4 04	
Brandram's B. B. Genuine	7 50	
No. 1	6 75	
f.o.b. Halifax, St. John, Montreal, Toronto	6 70	
Jones' genuine	6 70	
No. 1	6 20	

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 05	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
" Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe	1 35	1 40
Yellow Ochre (J.F.L.S.), bbls.		
per cwt	2 75	
Yellow Ochre (Royal), per		
cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt.	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	0 10
do. " Umber,"	0 10	0 09
do. " aw "	0 09	
Drop Black, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03½	

Ultra marine Blue in 28-lb.

boxes, per lb.	0 08	
Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green

Casks		
50-100 lb. kegs.		
25-lb. Irons		
-lb. Boxes		

Sulphate of Copper.

Casks, for spraying, per lb.	0 04½	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls.	per 100	1 75
Bulk		1 65
100-lb. cases (tins) per 100		2 00

Varnishes.

Carriage, No. 1	per gal.	1 50
Extra do.		2 50
Body Varnish		4 50
Furniture Varnish		0 65
Extra do.		0 90
Denar Varnish		1 60
Hard Oil Finish		1 40
Orange Shellac Varnish		2 00
White Shellac		2 20
Rubbing Varnish		2 50
Polishing Varnish		2 50

Linseed Oil.

Raw, per gal. net	0 42	
Boiled, per gal. net	0 45	
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net.	0 44	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 10	
Small lots	0 11	

Cod Oil.

Cod Oil, per gal.	0 50	0 55
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Glue.

(In bbls.)		
Common	0 07½	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatine	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear		0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent.		
Amer.		
Central Fire Cartridges, pistol sizes, Dom.		
30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p.c.		
Shot.		
Canadian, common, 15 per cent.		
Brass Shot Shells, 55 and 10 per cent		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	
Anvils.		
Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils..lb.	0 09	0 09½
Wilkinson & Co.'s Vices..lb.	0 09½	0 10
Augers.		
Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	5 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		
Awls.		
Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddler's, per gross.....	0 45	1 60
Awl Hafts.		
Patent Peg, oss.....		
" Sewing, per gross.....	7 25	8 00
Awl and Tool Sets.		
Millar's Falls, per doz.....	2 80	3 30
AXES.		
Splitting Axes.....	5 25	5 50
Chopping Axes—		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lane.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50
Axle Grease.		
Per gross.....	6 00	13 00
Bath Tubs.		
Zinc, discount.....	3 90	4 00
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount off revised list.		
Boxing extra		
Bells.		
Hand.		
Brass, 60 per cent.		
Nickel, 55 per cent.		
Door.		
Gon Sargent's.....	5 50	8
Peterboro', discount 50 per cent.		
Cow.		
American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		
Farm.		
American, each.....	1 25	3 00
House.		
American, per lb.....	0 35	0 40
Bellows.		
Hand, per doz.....	3 35	4 75
Moulders', per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		
Belting.		
Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		
Bench Stops.		
Per doz.....	5 00	6 00
Bits.		
Auger.		
Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		
Car.		
Gilmour's, 47½ to 50 per cent.		
Expansive.		
Clark's, per cent.		
Excelsior, 10 per cent.		
Gimlet.		
Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.		
Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 12	1 20
Blind and Bed Staples.		
sizes, per lb.....	0 7¼	0 12
Bolts.		
Carriage, dis., 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 per cent.		
Elevator, dis., 35 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		
Boring Machines.		
Complete, with augers, each..	5 00	7 50
Braces.		
Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Illar's Falls.....	15 50	29 00
Brackets.		
Shelf.		
Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20
Broilers.		
Light, dis.. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, ".....	6 00	
Henis, No. 9, ".....	7 00	
Queen City ".....	7 50	10 00
Butchers' Cleavers.		
From 8 to ch, per doz.....		4 23
Butts.		
Brass.		
Wrought Brass, dis., 17½ p.c. revised list.		
Cast Iron.		
Loose Pin, dis. 70 per cent.		
Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65
Can Openers.		
Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50
Card.		
Horse, per do.....	0 60	1 00
Carpet Stretchers.		
American, per doz.....	1 00	50
Bullards, per doz.....	6 50	
Carpet Sweepers.		
Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star, ".....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00
Cartridges.		
(See Ammunition.)		
Castors.		
Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		
Cattle Leaders.		
Nos. 31 and 32, per gross.....	8 50	9 50
Cement.		
Canadian, Portland.....	2 50	
English.....	2 50	
Belgium.....	2 35	
Canadian hydraulic.....	1 10	
Figures are for barrel lots.		
Chalk.		
Carpenters' Colored, per		
gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18
Chisels.		
Socket, Framing and Firmer.		
American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00
Churns.		
Daisy or Leader, dis. from stock or factory,		
60, 10 and 10 per cent.		
Steel, net.....		3 00
Clamps.		
Judds', dis. 20 per cent.		
stearns, per doz.....	3 00	10 00
Clips.		
Axle dis. 65 per cent.		
Coffee Mills.		
Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....		70
Compasses, Dividers, Etc.		
American, dis. 62½ to 65 pe cent		

Cradles, Grain.		
Canadian dis. 25 per cent.		
Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		
Door Springs.		
Torrey's Rod, per doz.....(15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00
Draw Knives.		
American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		
Drills.		
Hand and Breast.		
Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		
DRILL BIT.		
Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 to 50 and 5 per cent.		
ELBOWS.		
Stovepipe.		
Per doz	75	1 70
FAWCETS.		
Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star, ".....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....		1 70
Petroleum, per doz.....	4 50	6 50
FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 per cent. to 50 10, 5.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 per cent. to 50, 10, 5.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		
FLUTING MACHINES.		
Each	0 60	2 00
FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		
FREEZERS		
Ice Cream.		
Gem, from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		
FRUIT PRESSES.		
Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		
FRY PANS.		
Acme, dis. 65 to 67½ per cent.		
GAUGES.		
Marking, Mortise, Etc.		
Stanley's, dis. 50 to 55 per cent.		
Wire Gauges.		
Winn's, Nos. 26 to 33, each....	1 65	2 40
GLASS.		
Window.		
Box Price.		
	Star.	Double Diamond
	Per 50 ft.	Per 100 ft.
	Size United Inches.	Per 100 ft.
Under 25.....	1 30	2 50
26 to 40.....	1 40	2 70
41 to 50.....		3 00
51 to 60.....		3 30
61 to 70.....		3 60
71 to 80.....		4 00
81 to 85.....		4 50
86 to 90.....		
91 to 95.....		
96 to 100.....		
101 to 105.....		
106 to 110.....		
GLUE POTS.		
Tinned, each		0 30
Enamelled each.....		0 55
GRINDSTONE FIXTURES		
P. S. & W., per doz.....	3 30	4 00

HAMMERS.			
Nail			
Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.		
Tack.			
Magnetic, per doz.....	1 10	1 20	
Sledge.			
Canadian, per lb.....	0 07½	0 08½	
Ball Pean.			
English and Can., per lb.....	0 22	0 25	
HANDLES.			
Axe, per doz., net,	50	2 00	
Store door, per doz.....	1 00	1	
Chest, per doz. pairs.....	0 40	2 50	
Chisel.			
Firmer, per gross.....	3 00	4 50	
Socket Firmer, per gross....	3 25	8 00	
Socket Framing, per gross....	3 75	5 00	
Fork.			
C. & B., dis. 45 per cent. rev. list.			
Hoe.			
C. & B., dis. 45 per cent. rev. list.			
Saw.			
American, per doz.....	1 00	1 25	
Plane.			
American, per gross.....	3 15	3 75	
Hammer and Hatchet.			
Canadian, 45 per cent.			
Cross-Cut Saw.			
Canadian, per pair	0 15	0 0	
HANGERS.			
Door, 4 and 5 inch, per pair..	0 40		
Lanes, 50 to 50 and 5 per cent.			
HATCHETS.			
Canadian, dis. 40 to 42½ per cent			
HINGES.			
Blind, Parker's, dis. 60 and 10 to 65 per cent'			
" Shepard's Noiseless, dis. 60 per cent.			
" Buffalo, dis. 60 to 70 p. c.			
Light T and strap, 70 and 10 p. c.			
Heavy, per lb.....	0 03¾	0 04¾	
Screw hook and hinge—			
6 to 12 in., per 100 lbs.....		3 15	
14 in. up, per 100 lbs.....		2 35	
		Per doz. set.	
Screw Eureka.....	1 13	1 80	
Gate, Clark's.....	1 50	2 20	
" Shepard's, dis. 50 to 60 per cent.			
		Per doz. pai	
Spring.....	1 00	3 50	
" Shepard's Samson.....		1 20	
HOES.			
Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 lis			
Planter, per doz.....	4 00	4 50	
HOOKS.			
Cast Iron.			
Bird Cage, per doz	0 50	1 10	
Clothes Line, per doz	0 27	0 63	
Harness, per doz	0 72	0 88	
Hat and Coat, per gross.....	1 00	3 00	
Chandelier, per doz.....	0 50	1 00	
Wrought Iron.			
Wrought Hooks and Staples, Can., dis. 47½ per cent.			
Wire.			
Hat and coat, dis. 60 to 60 and 10 p.c.			
Belt, per 1,000.....	0 60	2 70	
crew, bright, Eng., dis. 60 per cent.			
HORSE NAILS.			
Canadian, dis. 50 p.c.			
Canada Horse Nail Co.'s "C" brand f.o.b. Montreal,	50 p.c.		
HORSE SHOES.			
F.o.b. Toronto and Hamilton 3 35			
Steel,	4 85	5	
F.o.b. Montreal 10c. less, and London more than above.			
ICE PICKS.			
Star per doz	3 00	3 25	
KETTLES.			
Brass spun, 7½ p.c. dis. off new list.			
Copper, per lb.....	0 30	35	
American, 60 and 10 to 65 and 5 p.c.			
KEYS.			
Lock, Can., dis. 50 p.c.			
Cabinet, trunk, and padlock, Am. per gross.....	1 60		
KNOBS.			
Door, japanned and N.P., pe doz.....	0 65	3 00	
Bronze, Berlin, per doz.....	2 75	3 25	
Bronze Gem, ".....	6 00	9 00	
Sava, ".....	8 75	10 00	
Shutter, porcelain, F. & L. screw, per gross.....	1 30	4 00	

KNIVES.

Clausa, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50

Cabinet,

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.
 Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 18
 Mystic Metal, " 08
 F. O. B. New York or Chicago.

MALLET.

Tinsmith's, per doz. 1 25 1 50
 Carpenters', hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent. 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.
 Cut Nails (Steel). Add 10c. to the prices in list for iron nails.

Wire Nails, basis, \$1.90 Toronto, Hamilton, London. Terms, 4 months or 3 off and 30 days; delivered in lots of 10 kegs or more.

Brads and finishing nails, special sizes, 80 p.c. from new list.

NAIL PULVERS.

German and American. 1 85 56

NAIL SETS.

Square, round, and octagon, per gross. 3 38 4 00
 Diamond 12 00 15 00

NETTING.

Poultry, 67½ per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
 Carbon safety " 0 18 0 00
 American w. w. " 0 00 0 21
 Pratt's Astial. 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50
 Zinc and tin, dis. 50, 50 and 10.
 Copper, per doz. 1 25 3 50
 Brass, " 1 50 3 50
 Malleable, dis. 25 per cent.

PAIIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25
 Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00
 Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis Mfrs., Bridgeport, Conn.
 No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00
 No. 38 Hand Machine, range 1½ to 4. 100 00
 No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.
 Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.
 Miscellaneous, dis. 25 to 27½ per cent.
 Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.
 Button's Imitation, per doz. 5 00 9 00
 German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

R. & L. Co., dis. 70 and 5 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00
 Axle " 0 22 0 33
 Screw " 0 27 1 00
 Awnings. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.
 Pitcher spout, 70 to 70 and 5 p.c.
 Canadian cistern, 60 p.c.
 Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85
 Conductors, " 9 00 15 00
 Tinners' solid, per set. 0 00 0 72
 " hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½
 Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½
 Sliding door, " 0 03½ 0 03½
 Lanes, " 0 02½

RAKES.

Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.
 Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00
 Boker's, " 7 50 11 00
 Wade & Butcher's, " 3 60 10 00
 Arbenz's, " 9 00 18 00
 Theile & Quack's " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURS.

4 mos. or 3 per cent. cash 30 days
 Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.
 Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.
 Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.
 Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.
 Black M. Rivets (Norway Iron) 60 p.c.
 Copper Rivets & Burs, 50, 10 and 5 p.c. dis. cartoons, 1c. per lb. extra net.
 Burs, iron or steel, 55 and 5 per cent.
 Terms, 4 mos. or 3 per cent. cash 30 days.
 RIVET SETS.
 Canadian, dis. 35 to 37½ per cent.

ROPE.

	Sisal.	Manilla
7-16 in. and larger, per lb.	6 00 7½	6 00 7½
¾ in. " " "	6 00 7½	6 00 7½
¼ and 5-16 in. " " "	7 00 8½	7 00 8½
Cotton " " "	15 17	15 17
Russia Deep Sea " " "	00 13	00 13
Jute " " "	6¾ 7½	6¾ 7½

RULES.

Boxwood, dis. 80 and 5 to 10 p.c.
 Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00
 " N.P., per set. " 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.
 B. & A. sand, 40 and 2½ per cent.
 Emery, per quire. 0 55 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.
 Kempshell's, dis. 40, 62½ per cent.
 Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50
 Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes, per dozen. 0 40 0 70
 "Empire," McMillan & Haynes, per ft. 0 00 0 70
 Hand, Diston's, dis. 12½ to 15 p.c.
 S. & D., 40 to 40 and 10 per cent.
 Crosscut, Diston's, per ft. 0 35 0 55
 S. & D., dis. 35 p.c. on Nos. 2 and 3.
 Hack, complete, each. 0 75 2 75
 frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 0 30 7 50
 Whiting, " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.
 B. S. & M. Scales, 50 p.c.
 Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50
 Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50
 Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.
 Wood, R. H., " dis. 80 and 10 p.c.
 " F. H., brass, dis. 82½ and 10 p.c.
 " R. H., " dis. 75 and 10 p.c.
 Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.
 Bench, wood, per doz. 3 25 4 00
 " iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., jappanned, dis. 75 p.c.
 B. & W., N.P., dis. 65 p.c.
 Seymour's, dis. 60 p.c.
 Enna, dis. 75 to 75 and 10 p.c.
 Heinisch, dis. 60 p.c.
 Bristol, jappanned, 80 p.c.
 " N.P., dis. 70 p.c.
 Claus, full nickel, 60 p.c.
 jappanned handles, 67½ p.c. off.
 Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10
 " " " 1 25 1 35
 Tin rim, per doz. 2 30 2 45
 " black. 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.
 Acme " 3 00 5 00
 Lock, Andrews'. 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English 1 8 5 00
 ron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross	7 50 12 00
Dessert, " "	21 00 00 00
Table, " "	30 00 30 00
Dessert Forks, " "	24 00 00 00
Medium " "	27 00 00 00
Table " "	36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90
 Steel, dis. 70 per cent., revised list.
 Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized " 2 25
 Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb.	0 28 0 60
Hindostan, " "	0 06 0 07
" slips, per lb.	0 09 0 09
Labrador " "	0 00 0 13
Turkey " "	0 00 0 15
Arkansas " "	0 00 0 50
Water-of-Ayr " "	0 00 0 10
Scythe, per gross.	3 50 5 00
Grind. per ton.	15 00 18 00

TACKS, BRADS, ETC.

Cheese-box tacks, blue, 80 p.c.
 Trunk tacks, black, 80 p.c.
 " " " 80 p.c.
 B.B.B. iron carpet, blued, 80
 " " " 80
 B.B.B. iron carpet, bright or blued (in kegs) 40
 B.B.B. iron carpet, tinned (in kegs) 45
 B.B.B. cut tacks (in bulk) 75 and 10
 " ¼ weights 40
 Swedes, cut tacks, genuine, blued and tinned, 75 and 10
 Swedes, upholsterers, 80
 Swedes, carpet, blued and tinned 70
 " lace 75
 " brush 50
 " gimps, blued, tinned & japan'd 75
 Zinc tacks 35
 Copper tacks 62½

Leather carpet tacks 65
 Trunk nails, black and tinned 70
 Clout nails 68½
 S. & M. box nails 45
 Lining nails in papers 10
 " " in bulk 15
 " " solid heads, in bulk 60
 Saddle nails in papers. 10
 " " in bulk 15
 Tinned capped trunk nails 15
 Double pointed tacks. discount 90 and 25 p.c.

TAPE LINES.

English, ass skin, per doz. 2 75 5 00
 English, Patent Leather 5 50 9 75
 Chesterman's, each 0 90 2 85
 " steel, each 0 80 8 00

THERMOMETERS.

Tin case and dairy, dis. 75 to 75 and 10 p.c.

THIMBLES.

Asbestos, filled, per doz., 35 to 40 p.c.

TIES.

Cow, per doz. 1 25 2 00

TINNERS' TOOLS.

P. S. & W., 10 p.c.
 Canadian, 35 to 37½ per cent.

TINWARE.

Stamped, dis., Assn. list, 80 per cent
 Jappanned, prices on application
 Pieced, prices on application.

CALKS (Steel)

Too calks, per M. net \$3 85
 Heel calks, " " 4 10
 Discounts, for 10 boxes at oneshipment 10 per cent.

TRANSMO LIFTERS.

Payson's, per doz. 2 60

TRAPS. (Steel.)

Game, Newhouse, dis. 40 p.c.
 Game, H. & N., P. S. & W., 65 p.c.
 Game, steel, 72½ p.c.
 Mouse, per doz. 0 35 1 50
 Rat, per doz. 1 40 6 50

TROWELS.

Disston's, discount 10 per cent.
 German, per doz. 4 75 6 00
 Brade's " 5 00 10 50
 S. & D., discount 35 per cent.

TRIERS.

Butter, per doz. 6 25 9 00

TWINES.

Bag, Russian, per lb. 0 21
 Wrapping, mottled, per pack. 0 50 0 60
 Wrapping, cotton, per lb. 0 17 0 18
 Mattress, per lb. 0 33 0 45
 Staging, " 0 27 0 35
 Broom, " 0 30 0 55

VISES.

Hand, per doz. 4 00 6 00
 Bench, parallel, each 2 00 4 50
 Coach, each 6 00 7 00
 Peter Wright's, per b. 0 12 0 13
 Pipe, each. 5 50 9 00
 Saw, per doz. 6 50 13 00

WASHER CUTTERS.

Per doz. 4 00
 Washers " Iron, 40 per cent., 4 months per cent.

WELL WHEELS.

Amer., per doz., 8, 10 and 12 inch. 3 38

WIRE.

Brass Wire, 16 to 25 wire gauge, 12½ p.c.
 Copper Wire, 12½ p.c. rev. list discount.
 Annealed, annealed and oiled, galvanized small lots, 30 per cent. discount off revised list.
 [In lots of 1,000 lbs., 35 per cent. discount, annealed oiled, and annealed and galvanized, freight will be prepaid when not exceeding minimum rate of 20c. per 100 lbs.]
 Bright, coppered steel and spring, 30 to 30 and 5 p.c. revised list, f.o.b. Montreal, Toronto or Hamilton.
 Broom Wire, per lb. 0 05½ 0 06
 Clothes Line Wire, 19 gauge, per 1,000 feet. 2 75 3 00

WIRE FENCING.

	Small lots.
Galvanized, 2 barb, 2½ and 5 inches apart.	2 15 2 20
Galvanized, 4 barb, 4 and 6 inches apart.	2 15 2 20
Galvanized, plain twist, all delv'd.	2 15 2 20
Plain twist.	2 15 2 20
Terms, 60 days, or 2 per cent. in 30 days	

WIRE CLOTH.

**PEARSON'S
PATENT**

Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2 1/2 to 48 inches.

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Fire and Marine

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Assets, over - - 2,320,000.00

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CHARCOAL PIG IRON MONTREAL.

BRAND "C.I.F." THREE RIVERS

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Managing Director and Treasurer

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E. T. WRIGHT & CO.

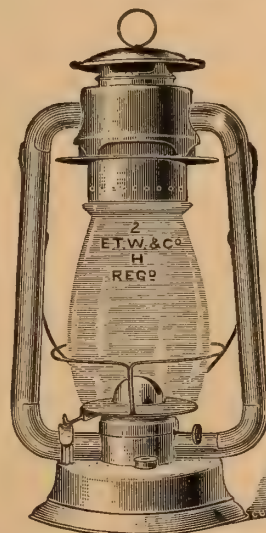
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Lanterns

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HIGH GRADE PIG IRON.

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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, OCTOBER 2, 1897

No. 40



MAGNOLIA METAL

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Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
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NO PACKING
NO DANGER

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The Slick Can will Help You.

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NO SOILED CLOTHES
NO DIRTY LAMP

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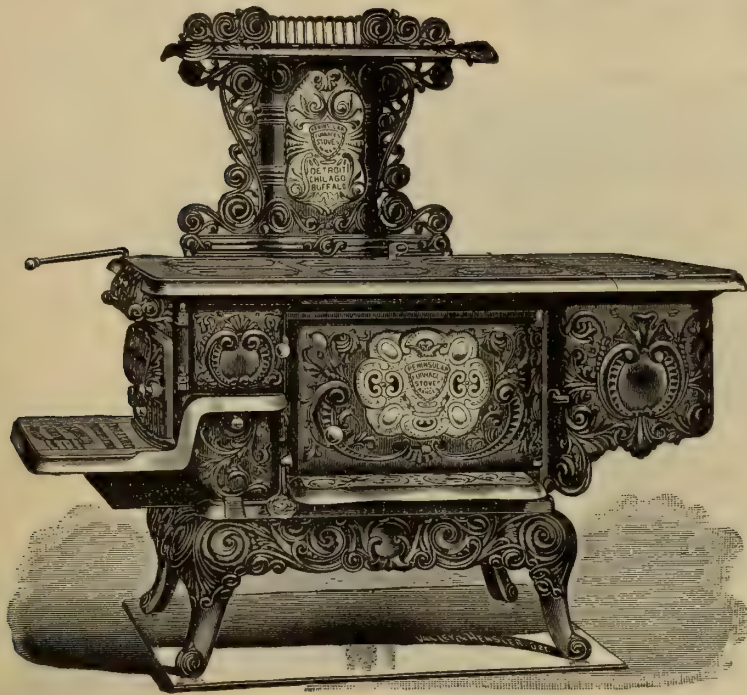


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In Six Selected Colours.

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In handy packages, Quarts, Half-Gallons and Gallons.

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For Steel Shingles, Implement Parts, etc.

One pound of Magnetic Red Dipping Paint will cover 100 square feet. No other paint in the world will do this except Diamond Graphite.

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Slate - - -	
Silver Grey -	

Prepared Bridge and Roofing Paints

"Graphite"	} In 1 Gallon Cans 5 Gallon Buckets and Barrels
"Elephant" Roofing	
"Diamond" Bridge	
"French" Barn	

Liquid Brick Paint

In 5 Gallon Buckets

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ALWAYS COLD.

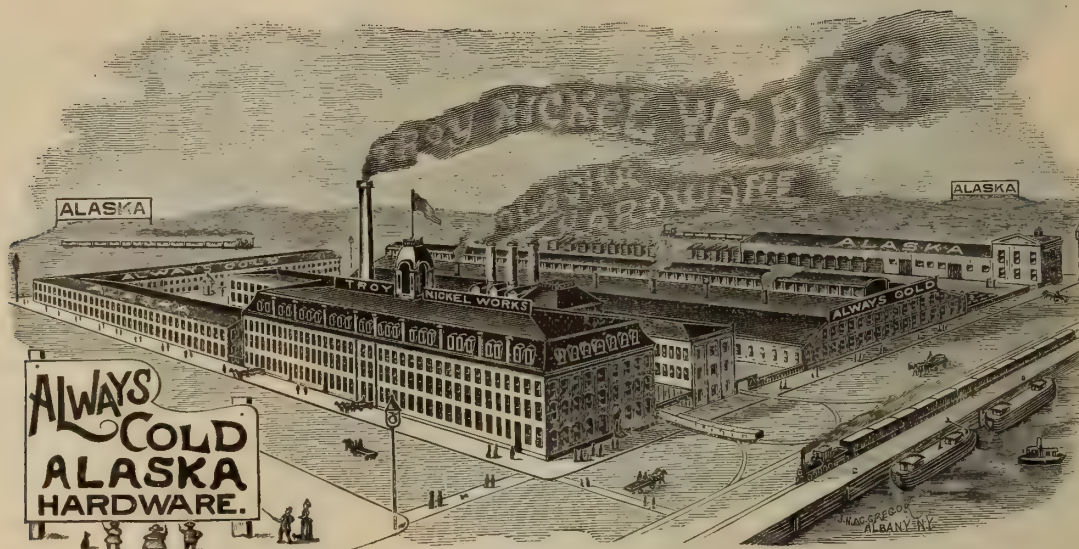
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Pipe Dampers
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ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc., Etc.



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send to us for prices. We will land
the goods at your door. WRITE US
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Little Ox

WOOD FURNACES

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the market. They never fail to give absolute
satisfaction. Made with Triple or Double re-
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Take 3 feet rough wood.

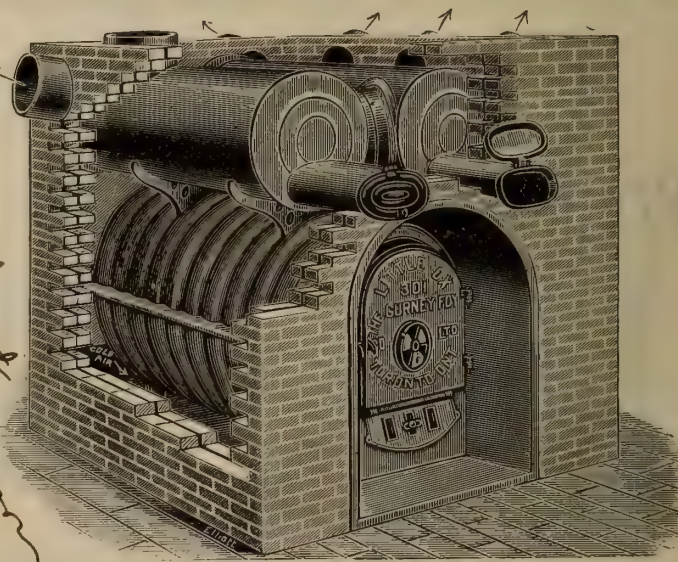
Have extra long fire travel.

Are smoke and dust proof.

Particularly easy to clean and regulate.

Portable or stationary for brick setting.

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Brick Set—with double return flue radiator.

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HARDENING TENDENCY IN IRON.

THERE is a hardening tendency to the great bulk of iron material at present, and the sharp advance established in many lines of heavy iron and steel infers the probability of higher prices in many lines of staple hardware.

An indication in this connection was the withdrawal by Canadian makers this week of all quotations on bar iron owing to the increased cost of their raw material.

It has surprised many observers that this was not done before, as the domestic bar, considering the price of the American and British article, was selling very low, indeed.

This action of the rolling mills in regard to bar is by many thought significant of advances in smaller goods also. For this reason the trade await the quarterly meetings which are to be held next week at Montreal with more than the usual interest, and they will not be surprised if there are changes in cut nails, bolts, rivets and other lines.

In contrast to this general tendency to firmness the unsettled values on wire are all the more remarkable. There is no agreement governing either wire or wire nails,

and makers are oblivious of the fact that their raw material costs more money.

Reference has been made before to the advance in wire rods at United States producing points, but the fact has had no tendency to stiffen values on wire or wire nails. On the contrary one leading mill this week notified the trade that it had increased its trade discount on plain wire 5 per cent.

As a result of this competition between the different makers such a thing as a fixed price for large lots of either wire or wire nails is an unknown quantity.

It will be interesting to see whether the advancing tendency in other material has any effect in dispelling this unsteadiness in wire. Another advance is in American steel hoops and bands, which have gone up \$2 per ton.

BICYCLE SUNDRIES.

AS a greater part of the bicycle business is now done by the hardware stores, and as no doubt next year will exceed all previous ones in this direction, it will be well for hardwaremen not to overlook the bicycle supply department.

A handsome and creditable display can be made for very little money invested, and it kept in a conspicuous place, no department will give better returns than this one, as it is a line which will stand good profit.

It must be remembered it is not necessary to overstock, as all that is wanted is a well assorted stock with all the latest improvements.

What would comprise the necessities asked for would be tires, cements, oils, tools, tool bags, saddles, pant and toe clips, balls, pedals, bells, cyclometers, lamps, etc., and even some of these, viz., tires and saddles

there is very little call for, except in large centres.

In the matter of cyclometers great care should be exercised in getting the best, as the cyclometer is similar to a watch. A bad one is a nuisance and should be avoided. To meet the needs of an every-day cyclist a cyclometer should have both trip and total dials, barrel shape, easy to read from the saddle, simple and durable in construction, easy to re-set the trip dial, register correctly, and inexpensive.

Several cyclometers have been put on the market this year, but very few of them come up to requirements. It is true the makers offer to repair or make good any defective instruments, but that is of little satisfaction to riders at a distance from where they are made. Cyclometers are bought for use, not to be sent to the makers for repair. Retailers should pay particular attention to this supply department.

ADVANCE IN BARB WIRE.

LAST week we had occasion to notice the low price at which barb wire was being sold by manufacturers and dealers in Toronto and the west. This week the feature is of quite another character.

Barb wire is now being held at from 10 to 15c. per 100 pounds higher than a week ago.

The ruling figure in B is \$2.30 per 100 pounds, Toronto, for ordinary lots. As to outside points, prices will vary, being based upon the freight rates from Pittsburg.

Plain twist is quoted at the same figure as barb wire, and for staples \$2.50 is the idea.

The cause of the advance is the appreciation of the raw material, which is about \$2 per ton.

GOVERNMENT APATHY.

THERE are certain things which any Government is warranted in keeping secret. There are others which it is not.

As everyone knows, the minimum tariff of Canada is now, since the decision of the law officers of the Crown, enjoyed by about a score of nations having favored treaties with Great Britain.

On July 31st next the treaties with Germany and Belgium will expire. What the Canadian Government will do then is a question. Will it continue the preferential tariff in favor of Great Britain or will it not?

Since the treaties with Belgium and Germany were denounced two months have elapsed, but not one word has yet come from the Government as to its policy. It is time that a pronouncement of some kind was made.

The preferential tariff was launched in the belief that the treaties with Germany and Belgium did not prevent Canada from giving the products of the Motherland a preference in the home market. That belief the ruling of the law officers of the Crown dissipated, and the dissipation of that belief created a condition which demanded a new statement of its policy in this particular matter.

That the need of the Government expressing its intention is not supposititious is evident from the action of the London Chamber of Commerce. That body has gone to the trouble of issuing a circular "designed," the cable tells us, "to remove the uncertainties of English shippers as to the Canadian tariff," while it is further remarked that "uncertainty as to the Canadian Government's intention after August next also tends to retard trade."

This is no political matter, directly at any rate. It is first and foremost a purely business matter, and as such should be dealt with in a business-like way. This it can hardly be said the Government has done. It has delayed; and delay is not business.

The Government should "speak now." It is no local interest that demands it. No, nor even the country's interest solely. It is demanded in the interest of inter-imperial trade as represented by Canada on the one hand and Great Britain on the other.

Apathy toward the business interests of

the country in a great measure caused the downfall of the late Government. And the present Administration is by no means free from the same complaint. Energy is a sure antidote, and the Government will be wise if it takes copiously of it.

A business is built up by a chain of circumstances. See there are no weak links in the chain.

WIRE NAIL SITUATION.

THE demoralized condition of the price of wire nails in Toronto and the west noted in last week's issue is worse rather than better.

The ruling figure now appears to be \$1.85 f.o.b. Toronto, but sales have been made of carload lots delivered in London at that figure, which would mean, allowing thirteen cents for freight rate, about \$1.73 at the factory, Toronto.

It is not likely this state of affairs can exist much longer. And first of all because the figure is too near the margin of cost. In fact, it is contended that those factories which import their wire cannot get their own money back. Then the figures now ruling are something like 38 to 40c. per keg below the price it would cost to lay Pittsburg nails down here.

Manufacturers appear to be getting tired of the present unsatisfactory basis of prices, and **HARDWARE AND METAL** would not be surprised to hear of an advance before a great while. The representative of one manufacturing concern remarked to a representative of this journal a couple of days ago that it was possible figures might be advanced to within 5 or 10c. per keg of the figure ruling in Pittsburg, freight and duty added.

Lower prices than those now ruling can scarcely obtain.

A SIGN OF GOOD TIMES.

Good times appear to be with the McClary Manufacturing Co., Limited. Last week there was shipped from the firm's headquarters in London, Ont., to various points in the Dominion, stock, including tin and enamel ware, to the weight of 97,054 pounds and 1,221 stoves, ranges and furnaces. This was equal to about three carloads daily, and did not include odd, small lots sent out from the factory. The company declare it was a record week.

A PAYING INVESTMENT.

TO THE readers of **HARDWARE AND METAL** this fall the paper could not have been other than a paying investment. On turpentine alone pointers were given that should have meant much more than the subscription price. On August 7th we quoted turpentine at 39c., predicted an immediate rise, and advised immediate purchases by retailers. The price now is 46c., or in less than two months there has been an advance of 7c. a gallon. The gradual rise we kept weekly expecting.

If a merchant bought when he was advised to do so he would now have saved about \$2.80 on each barrel purchased. Then there was a rise of 15c. in glass advised in these columns, and the advance of 4c. a gallon in linseed oil was also foretold.

The situation of white lead was thoroughly discussed in the market reports before the advance of a few weeks ago. This is a sample of the occasions where steady readers of **HARDWARE AND METAL** can make profitable investments where others cannot.

Again, it can be said that the tendency of turpentine is upward, and a further advance is possible. The cause of this is said to be due to the existence of a large English syndicate which is buying up all the turpentine in the south on which they can lay their hands. Whether, however, they can keep controlling the market is difficult to determine, for the supply is likely to be increased two fold. When that point is reached there will naturally be a decline; but that point has not yet been reached.

THE GALVANIZED IRON SCARCITY.

The difficulty of getting galvanized iron appears to be increasing rather than decreasing. The difficulty is nearly altogether in regard to United States iron, although the lighter gauges of English iron are very low.

In Toronto and the west the demand is chiefly for galvanized iron of United States make, and some jobbing houses report they are cleaned out of 26, 28 and 30 gauge, while manufacturers advise the trade that they will be unable to accept orders to be filled sooner than 90 days.

Besides the good demand the United States manufacturers are experiencing, it is probable the effect of the recent factory and coal strikes has not yet been overcome.

ALREADY PROVING BENEFICIAL.

TORONTO has this week been visited by several large lumbering concerns from the United States who, contrary to expectations, are making arrangements to go into the woods in Ontario the coming winter.

Owing to the recent order-in-council compelling lumbermen to buy their supplies in Canada the wholesale trade in Toronto is already experiencing beneficial effects therefrom.

Formerly where only part of the supplies for the lumber camps were bought in Canada now the whole of them will be, and this has been a cause of encouragement to merchants in Toronto and other Ontario cities during the past week or ten days.

SUPPLIES FOR THE KLONDIKE.

Some enquiry has been heard in Toronto during the week for supplies for shipment next season to the Klondike. The quantities required are large, and include all such articles as a hardware house can supply, including fishing tackle, rifles, guns, etc.

Prospecting parties are being organized

in London (England) and New York, and next season will probably see a demand for miners' supplies. Canadian business men should see that they are not overlooked by intending purchasers. And advertising will help them in the premises.

A SHORTCOMING OF EXPORTERS.

ONE of Canada's greatest needs is an enlarged export trade. That the need is recognized is evident from the efforts which are being made by manufacturers and others. In some lines the development has been most satisfactory; in others it has not.

It is worthy of note that the lines with which we have met with so much success are chiefly those the quality of which excels that of our competitors. Cheese may be cited as an example of this.

It is also worthy of note that in a great many articles in which the attempts to build up an export trade have not proved successful, the cause of partial or total failure has not been quality.

It has been want of advertising.

We have before us the last quarterly report of the Department of Trade and Commerce, and therein contained are the reports of the various commercial agents of the Dominion. Three of these reports are from Mr. J. S. Larke, the

Canadian agent in Australasia. And it is the perusal of his reports that has induced the remarks we have made.

In his reports he enumerates certain articles of Canadian manufacture which have not so far taken hold upon the Australasian market, and in every instance he ascribes want of advertising as one of the chief causes of the failure. One or two firms, we are told, induced agents to do a little advertising by allowing them a little extra commission, but, as is usually the case, this did not prove satisfactory.

The English, the German, and the United States manufacturers who are doing business in Australasia recognize the value of advertising and employ it. Some of these manufacturers, Mr. Larke tells us, advertise magnificently.

If Canadian manufacturers are to find a market in Australasia or any other country, they must advertise them. If they are not prepared to do this it is evident failure and not success will be the rule.

The Dominion has spent a great deal of money in subsidizing steamers, maintaining agents, etc., to build up a trade with Australasia, and it is to be regretted that our manufacturers who essay to do business at the Antipodes do not employ as they should one of the most powerful of trade-building factors.

The Only Way

to discharge an **Iver Johnson Automatic** revolver is to **PULL THE TRIGGER**. The hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc. are avoided.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

CHANGES IN BUILDERS' HARDWARE

DURING the past decade changes in builders' hardware have been so radical and of such a sweeping nature as to almost have altered the complexion of this all important line of the hardware trade. Considering that it comprehends more than one-half of the items sold by the hardware merchant of to-day, a synopsis of the changes in this line given by a western merchant in Iron Age is of vital importance.

Not so long ago the beginning of better things came with the wide extension in the use of the cylinder lock and its consequent cheapening in price, though this was not so generally valuable as the introduction of the steel lock, which rendered possible a structure and mechanism unknown before. It was early recognized by those in the metal trade that the theory of the steel lock was correct, though it is only recently that it has begun to fulfil the promise of earlier days. It would seem that the product of the die must displace that of the mould on the score of cheapness alone—as such has been the general result; yet to-day as regards comparative prices, the steel rim lock is still a disappointment, and the cast rim shows no sign of losing ground.

With mortise steel locks there is a different story to tell, especially since the advent of two new and important factors in this field, and it does not require much foresight to prophesy that the cast mortise lock has had its day. Incidentally one result of the growth in the use of mortise locks has been the gradual elimination of the better and medium grades of rim locks. As a corollary to the idea of the steel lock came the application of stamped work to trim of all descriptions, since an elasticity in treatment of design, a cheapness in price and a variety in ornamentation were thus afforded, which threw the cast articles completely in the shade.

The conservatism and conventionality of the hardware trade in this line was revolutionized to some extent by the application of the art idea, which gave to hardware the dignity of good taste and artistic perception. At present it does not seem to be so much a question of immediate further progress in this direction as of systematizing and assimilating what we have already grasped. The average manufacturer is still somewhat dependent upon the designer. In ornamentations especially for stock patterns the tendency is distinctly toward the simpler and severer styles, and the excessively ornate is for the present in disfavor.

In matters of detail we see the final triumph of the solid steel key, all in one piece, cold forged, and apparently the solution of the knob spindle problem, in the

shape of the divided spindle that holds firmly and cannot get loose, and, in all but the cheapest forms, costs no more than the old-fashioned article.

In the line of butts it is evident that the cast butt is doomed to displacement. The steel butt is gradually coming into general employment.

The great expansion in the production of spring hinges has naturally seriously affected the sale of butts of all kinds, and will continue to do so more and more. This is one reason why steel butts have not shown even larger increase.

Figured butts have very suddenly gone quite out of fashion, and it is no longer thought necessary that butts shall match the remainder of the trim of the house.

The figured-face lock is another dying institution, as is also the rabbeted-face lock and the astragal-front sliding door lock. These changes emphasize that steady drift toward the simplifying and condensing of builders' hardware lines that will eventually do away with the bugbear of dead stocks of obsolete styles and patterns that can be disposed of only as scrap. It is not too much to say that the stocks of the average manufacturer and jobber show useless multiplications of similar sizes and kinds that serve no purpose but to confuse both buyer and seller.

The most encouraging sign of the removal of this changing of styles is in the production recently of mortise steel locks, where thought and mechanical skill have effectually solved the problem, both as to fitness of purpose and simplicity of presentation.

There is further reason to believe that the time is not far distant when the same solution will be reached in that vast mass of small stuff—catches, turns, bolts, fasts and that ilk—which is indifferently denominated shelf or builders' hardware. These goods are a heterogeneous mass, and, save in rare cases, without originality or the evidence of any intelligent treatment, either in structure or appearance, in regard to fitness for purpose intended. One manufacturer has generally been content to imitate the other, save when he produced a variation, which, scientifically speaking, was usually a degenerate species. What is needed, and what will eventually come, will be that system of elimination, of classification and of reconstruction that is now being applied to locks and their trim. Of some of these items in particular it may be said that shutter bars, shutter knobs and inside blind hinges have suffered with the going out of inside blinds, and common sense would seem to forbid the return of the latter.

Fasts are peculiarly things of fashion and change, and nothing can be safely predicted

about them, save that the popularity of any one of them is sure to be ephemeral.

A final survey of the field must give us the idea of a steady evolution in all lines of builders' hardware toward constant improvement, and that it demands, both in its manufacture, its sale and its application, the constant use of skill, of intelligence and of good taste.

QUALIFICATION FOR HEAD CLERKSHIP.

How long a clerk must be in the business to be competent as head clerk depends entirely upon his mental calibre and his chances for learning. Some will learn more in a year than others do in five years. If he spends all his time in one place where he delivers orders, he will not make much progress; but if he changes places, or if he has a good boss who knows how to teach him, he can learn a great deal in a year, and if he is bright and old enough when he starts in he may be more competent to run a store within two years than some others are in ten years. The clerk who begins his career at 15 naturally has to work four or five years before he can be a good head clerk, because he must be old enough for it; but the intelligent man, who starts in at 20, can become competent very rapidly, and he shows very little spirit if he should want to go through the usual routine of working for \$5, \$6 or \$7 a month for the first year; for \$7, \$8 or \$9 the second, and, finally, after four or five years, become head clerk at a salary of \$18 or \$20 per month, as so many do in this city.

The writer knows of a clerk who conducted a large store as head clerk after an experience of only five months, although it was after serving an apprenticeship in Germany.—Exchange.

TELL WHAT YOU ARE DOING.

The man who makes and the man who sells the best things has not done his duty when he stops with making and selling, says Michigan Tradesman. He must tell the people what he is doing. It is a duty he owes himself. It is a duty he owes the people. The makers and sellers of good things are not doing their full duty to society. They cannot expect people to come and hunt them out. They cannot expect people to think and become educated along lines when it is their duty to do this for them. The most of the people do things because others tell them to do it—not in response to command, but as a result of appeals to them in such a manner as plays to best advantage upon the foundations of activity, the emotions, the passions and ambitions.

LONDON BOARD OF TRADE.

THE London Board of Trade had a short meeting last Friday night, and several matters in the hands of the secretary were disposed of.

The secretary read a letter from the Government announcing receipt of the communication from the Board of Trade in regard to the importance of improving Port Stanley harbor.

Mr. Gunn wanted the secretary instructed to address another letter to Mr. Tarte on the subject, drawing his attention to the fact that the harbor, as it at present stood, was of no practical benefit. A motion to this effect carried.

Mr. Nelles explained that Mr. Bland had drawn his attention to the fact that the mail for Montreal and the east was now closed at 3.50 p.m., as previous to the last meeting. He had received a communication from the postmaster stating that a supplementary mail for Montreal would be kept open until 4 o'clock.

It was the opinion of the board that the mail for Montreal could be kept open until 4.15. In some places certain bags were kept open until just about train time. If there was not enough help in the London post office, more could be secured, and then one man could attend to the mail for Montreal. It was resolved to bring this matter before the Postmaster-General.

In connection with presenting these petitions to the Government, Mr. Pearce said the mail department of the Customs House opened at 9 o'clock and closed at 4. This was continually a source of great inconvenience, and last fall he had lost \$30 through being unable to get a sample of timothy seed at 4.30.

A motion passed to request the Minister of Customs to have this department kept open until 6 o'clock.

A communication from John Earls, of the Freight Agents' Association, re car service, was read and filed.

F. Edworthy, secretary of the Victoria, B.C., Board of Trade, in a lengthy communication, requested the co-operation of the local board in diverting the mining trade from San Francisco and Seattle to British Columbia. The Klondike being in Canada, no duty is charged miners for their supplies. This is not the case when the supplies are purchased across the border, in American ports.

Mr. W. A. Gunn said he had received a similar letter from one of his western customers, and moved the following resolution:

"That this board notes with pleasure the steps taken by the Government to develop the all-Canadian routes to the further North-

BUSINESS IS BOOMING

If you're not busy now you ought to be. Business is good—better than it's been for a long time.

If you're not busy you are not getting your share of what's going, and there must be something wrong—either with your goods or your methods.

If it's Paints and Varnishes we can help you. We're helping many others for we're very busy now—just **twice** as busy as we were this time a year ago.

We can help you sell more paints—our goods and methods will increase any intelligent business man's paint business.

If you are not handling

THE SHERWIN-WILLIAMS PAINTS

you are missing an opportunity to increase your business—a chance to make more money.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

West and the Klondike territory. They trust their efforts may be fully successful, and they feel that expense incurred in this direction is amply justified by the volume of business already obtained in that section of our country, and the prospects of an enlarged trade. They should suggest that the fullest publicity be given to the fact of the development of the Canadian routes, and the advantages that all supplies can be purchased in Canada more cheaply and equally as good as in the United States, and by this means obviating the necessity of paying duty when entering the country; also that a copy of this resolution be sent to the Minister of the Interior."

IMPROVED ASH-SIFTER.

Mr. P. R. Krasel, Montreal, is the patentee and manufacturer of the latest improved ash-sifter, a cut of which appears in the advertising columns. He claims this sifter can be used in the kitchen without injury to furniture or clothes, also that a child ten years old can operate it. The ashes pass through two screens of different mesh before being deposited in the ash pan and the burnable coal is separated into two sizes, the large in one and the small in the other. Write for sample, as the manufacturer will pay express charges to any part of Canada.

COST OF TROLLEY POWER.

A table taken from the annual reports of the Railroad Commissioners of New York and Massachusetts for nearly all of the street railway properties shows the cost of the electric power required to run a car one mile under average conditions of load, etc. The table gives the number of cars owned, the car mileage per year and the cost of the electric power per mile and per passenger. Of the nineteen companies operating less than 250,000 car miles, four are obtaining power at a cost of less than 2 cents per car mile, six between 2 and 3 cents, five between 3 and 4 cents, one between 4 and 5 cents, and three at more than 5 cents; of the five companies operating over 5,000,000 car miles per year, one obtains the power at less than 1 cent per car mile, three between 1 and 2 cents, and one between 2 and 3 cents; other similar figures are also given between these limits. The Brooklyn Heights Co. has the cheapest power, 0.86 per car mile, followed by the Binghamton with 0.94. The cost of power for Massachusetts roads includes repairs and depreciation of the station plant, which is not the case of the New York roads.—Street Railway Journal.

A WORD WITH THE HELPERS.

RECENTLY the senior member of a very prominent and successful firm, says an exchange, remarked: "It is imperative that we have helpers. Whenever we find men that are reliable, worthy of confidence and helpful to the business, they are encouraged and pushed forward, for we cannot afford to part with men upon whom we can depend. Helpers that you can lean upon add to the pleasures of mercantile life and relieve the strain, and, therefore, it is only natural that the head of a house should tie up to helpers that are a comfort."

Boys! Are you of that sort? Or do you serve in a half-hearted way, having no other object in view than to secure your salary? Do you object to pushing the business, and have you enlisted in the ranks of those who have to be pushed?

In Gen. Forsyth's story of Sheridan's famous ride, told in the July Harper's, he says that Sheridan as he pushed to the front motioned the retreating soldiers to turn and follow. They did, and under his superb leadership won a great victory. They helped their leader; obeyed without comment or criticism; they pushed to the front. Is not that the business of every helper, from office boy to partner? Should not such service be a pleasure as well as duty?

Each person in a store or factory is part of a great machine, and unless each part does its full share of the work there will be trouble.

The salary should be the least thing in the helper's thought; the business his supreme thought. He must put his heart into his work, if he is to win position and a competency.

Just as soon as a leader finds that any helper is an aid, and is furthering his interests, just then he will take measures to make their interests identical. The worthy man—the profitable helper—does not have to beg or demand proper recognition. Almost every member of the leading wholesale grocery firms worked their way up from the ranks. Some began as office boys, being of the tireless sort, whose minds are fixed on their work, and not on outside matters. They sought to render more than an equivalent for their wage, having faith in their leader and themselves. They kept pushing to the front.

It is a mistaken notion that there is not still "room at the top;" that the helper has no chance in a big house. The opportunities of to-day are more numerous than they have ever been. The trouble is to find men able to grasp the opportunity. Success is in the boy or man and not in some-body else.

When Gen. Forsyth led the troops in the

charge at Winchester, he told the color-bearer to let him carry the flag, because he was mounted and the troops could see it better and be influenced to push along to the front. The color-sergeant obeyed, but he put his hand on the saddle and pushed to the front alongside the flag. Let every helper do the same thing. If your leader is a success, if his place has been won, trust him to push along without criticism. Don't stop to find fault. Don't talk about the hardships of your work with your fellow helpers. Don't growl about your salary. Don't be impatient, "for the race is not always to the swift, nor the battle to the strong."

Remember that work—steady, incessant work—is the secret of success in life. There is not a leader at the bar, in politics, at the head of any of the professions, that does not work, work, work; not eight hours, but oftener sixteen hours every day. Leaders always hold fast to the workers.

COPPER STATISTICS.

The following statistics show the apparent increase in the consumption of England, France and Germany to be at the rate of 19,291 tons per annum. The Board of Trade returns for the first eight months give the following results:

	1896. Tons fine.	1897. Tons fine.
Imports into England	89,209	92,186
Exports from England	43,549	34,805
Difference	45,660	57,381
Difference in stocks, 1st January to 1st September, decrease	11,930	2,217

Apparent consumption in England
(including sulphate of copper made
and subsequently exported)

The following shows the consumption of
France for the same months:

	1896. Tons.	1897. Tons.
Shipments from United States	14,077	16,593
Shipments from England	3,656	2,429
Imports from other countries	7,027	8,420

Difference in stocks 1st January to
September, decrease

The increased consumption of England
and France is therefore 3,670 tons.

The official German returns for the first
seven:

	1896. Tons.	1897. Tons.
Imports	33,090	41,476
Exports	5,312	5,556
Consumption	27,778	35,820

The consumption of Germany therefore
shows an increase this year of 8,042 tons,
exclusive of the copper obtained from their
own mines and from pyrites imported—or at
the rate of 13,786 tons per annum.

* Increase.

CAST STEEL.

"Cast steel" is a term that was introduced to distinguish crucible steel from "blister steel" or "weld steel" at the time crucible steel came into use, and once indicated the highest quality. To-day the term means nothing definite, and Bessemer and open-hearth steels, both basic and acid, now are all "cast steels."



NO SMOKE. GREAT RESULTS.

HIGH VELOCITIES
LOW PRESSURE
LONG RANGE

EXTRA HARDENED, DOUBLE WATER-PROOFED,
RELIABLE, SAFE, NO JAR,
HARD HITTING.

Quick and Strong, With Perfect Combustion

The Favorite Powder.

The Choice of Experts.

The Powder of Powders for a variable
Climate.

UNEQUALLED RECORDS.

TRIALS BY ELEY BROS., AND
"ROD AND GUN."

VELOCITIES:

At 21½ yards, 1012·68 feet per second.
" 43 " 872·72 " " "

Far in excess of any other Powder
Nitro or Black

Pattern 233.

Pads Penetrated (Eley's Special) 30·6.

Pressures 2·17 Tons Only.

All future issues made to this standard. Full report of
trials can be had on application to the Company or their
Agents, also copies of

THE NEW "SMOKELESS (SS) GAME REGISTER"

Smokeless Rifle and Revolver Powders:

(SR) For Martini-Henry and similar large bore Rifles;
also for Punt Guns.

*RIFLEITE "303."

For Lee Metford and other Magazine and
Sporting Rifles, '236 to '315 calibre.

*RIFLEITE "450."

For Sporting, Express and Military Rifles
'300 to '577 bore.

(SK) For Rook and Rabbit Rifles of '230 to '380 bore,
also for Morris Tubes.

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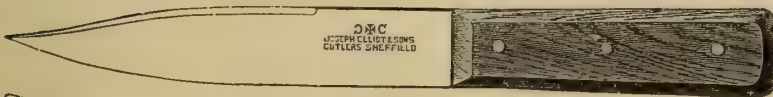
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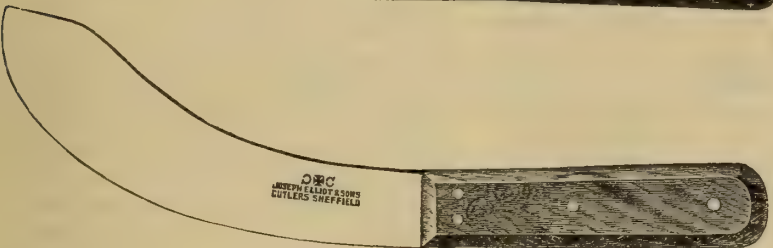
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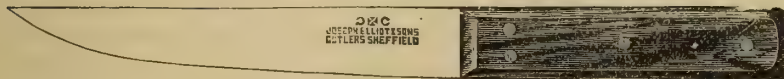
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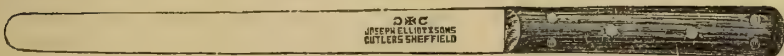
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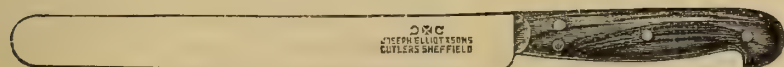
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ELLIOT'S Boning Knives



ELLIOT'S Ham Slicers



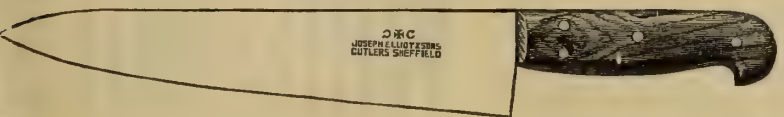
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ELLIOT'S Cook's Knives

**Orders
Solicited**

Graham Cut and Wire Nails are the Best.

**Our Prices
Are Right**

H. S. Howland, Sons & Co., Toronto

OBJECTIONS TO THE CHAINLESS BICYCLE.

DR. R. C. CARPENTER, professor of experimental engineering at Cornell University, has been doing a great deal of experimental work in an endeavor to find the relative merits of a bicycle driven by a chain and one of the chainless variety. His deductions are interesting. He says :

"Our investigations are not entirely completed at the present time, but it seems safe to announce that all the tests indicate that no form of gearing can possibly equal the best chain for efficiency and durability. Some of the results of the tests may be interesting, and it may be briefly stated that the friction with the best chain varied from one-half to three-quarters of one per cent., and this result was obtained with a chain which had been in use on a wheel that had been ridden for more than 2,000 miles by a rider weighing nearly 200 pounds. This would serve to show that high-grade chains can be and are made which do not change their form by wear an amount sufficient to affect the friction. Tests were made on a large number of other chains and the friction was found to vary from two to five per cent., depending upon the condition of the chain, the method of the construction and details of the design. The highest friction we have found, even in the case of an old chain, which did not fit the sprocket properly, did not exceed ten per cent., although I am willing to concede that a considerably higher friction might in some instances be found.

"Regarding the use of gears, extensive investigations have been made from time to time which show the amount of power lost in friction. The very best recorded results with spur gearing are very nearly equal to those obtained with the ordinary chain when the gearing is in the best condition and working accurately in line and position. The best kind of bevel or spiral gears, a form which must be used in bicycle work, show about three times the friction of the spur gears, and since two pairs must be used on each bicycle, about four times as much friction as the ordinary chain will be developed and six to eight times the friction of the very best chains.

"There is another serious objection to the use of gears arising from the fact that the least change in position of the point of contact of the gear from its normal will cause a great increase in friction and in loss of power over that stated in the preceding discussion. This indicates that the gearing is essentially unfitted for a frame which must from the very nature of its use possess great elasticity and flexibility.

"In our investigation the friction of several bicycles running under ordinary conditions—was measured. This for the very best wheels under heavy working conditions was found to be from five to eight per cent. of the power supplied, while with some of the poorer wheels the friction was 20 to 40 per cent.

"One of the noted manufacturers of high-grade wheels kindly permitted an opportunity of comparing a chainless wheel, which was constructed in the most approved manner, and with the friction reduced to the smallest possible amount, with the same kind of wheel equipped with the best chain. The results were uniformly from five to eight per cent. in favor of the wheel with the chain, or just about the amount that could have been predicted from previous tests of gearing.

"The chainless wheel also developed one extremely bad feature, and, as this is inherent in all methods of gearing, it may be perhaps worth mentioning. With all the chain wheels the percentage of friction or loss of power remained essentially constant at all speeds, but with a geared or chainless wheel the percentage of friction increased as the speed diminished. This would make the chainless wheel very objectionable for climbing hills, since at that time the speed must be slow and all the power of the rider must be used to propel the wheel forward."

WHEELS.

"**R**IDE a cock-horse to Banbury Cross," sang old Mother Goose, and the melodious dame was a truer prophet than she deemed; for somewhere about 1818 a rough wheeled affair of that name jogged through London streets. Here is how the poet John Keats describes it :

"It is a wheel-carriage to ride cock-horse upon, sitting astride and pushing it along with the toes, a rudder wheel in the hand. A handsome gelding will come to eight guineas, however. They will soon be cheaper, unless the Americans take to them."

This was followed by the dandy-horse, an improvement with the head of a steed, wooden wheels, and padded seat, on which the postman pranced through the rural districts, in the thirties, at about the rate of seven miles an hour. The dandy continued in use until the advent of the velocipede. This was a cumbersome structure, and ere long gave place to the "ordinary," the first real bicycle, but six feet in height. Still, the right track was reached at length, and ultimately, with rival variations in the form of tricycles and unicycles, the present "safety" was evolved. It has held its own for a full decade, and probably will

continue to hold it until some electric motor of moderate price puts it to the blush.

In ball game and on the fleetly speeding bicycle woman now takes her place, side by side with man, as she never did before. Our grandmothers, in their sedentary youth, spun on picturesque whirling wheels beside the open fire; but the fin de siecle maid takes her spins upon the merry modern wheel with pneumatic tires.—Agnes Carr Sage, in October Lippincott's.

GEAR CUTTERS ARE SCARCE.

FROM all the perfervid talk of chainless cycle manufacture one may readily be forgiven for concluding that the desire to engage in it is paramount. The feasibility of the project—given wealth to encourage success and no infirmity of purpose to balk fixed intention—is never challenged. But to plan is one thing, while to execute is another.

Who will supply the machinery for cutting bevel gears? When will it be delivered in the factory? The kernel of chainless cycle construction is hidden in these two questions, which are propounded by those pausing at the new manufacture with a decree of anxiety bordering on despair. The slow process by which gear cutting establishments have been worked up to enthusiasm over the prospect of supplying bicycle manufacturers with machinery is responsible for the scarcity of machinery houses which are prepared to take orders, and to this disturbing discovery is added the disconcerting intelligence that of the three concerns which are striving with might and main to execute commissions now in hand none will bond themselves to promptly satisfy new customers. They are taxed to their utmost capacity. These twin misfortunes are calculated to rudely shock those bicycle makers who imagined that by the practice of indecision and studied delay at the present moment they would later be in position to reap benefits equally with the more venturesome folks who are already blazing the way to a new field.

One firm in Philadelphia, another in

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Also full lines of *Butler's, Rodgers' and
Askham's Cutlery, German and English
Razors, Carvers, Pens and Pocket Knives*



QUICK SHIPMENT. CLOSE PRICES. LARGE STOCKS.

Hartford, and the third in Providence are, in the opinion of those who have given the manufacture of chainless bicycles the deepest study, all that can be enumerated as having special qualifications for supplying accurate gear cutting machinery. Each of these establishments has its well defined limit of production, just as a few years ago our screw cutting machinery houses were limited in their special ability to serve bicycle makers who were in a hurry for labor-saving machines. The whole subject of chainless cycle manufacture has been in dispute for so long a time upon the score of superiority that the gear cutters well nigh despaired of ever being drawn into business relations with bicycle manufacturers, and even to this hour the orders which they have received do not warrant them in making extraordinary expenditures for the purpose of anticipating the needs of customers who, while they evince a fondness for chainless manufacture, are still skeptical as to the manner in which the public at large will receive it. Only one of the three houses before mentioned as being famed for the accuracy of their tool work is of such magnitude as to justify the hope that at the bare solicitation of bicycle makers they would make heavy preparations for the supply of the new machinery.

But this only takes notice of one-half the

problem which is bothering bicycle makers with a weakness for the projected new style in construction. Where are they going to get their presses for stamping out the gear covers and special parts? Or, if they should elect to have the stamping work done for them by houses making a specialty of such work, what preparations have they made for the supply of pattern drawings? Only three or four firms have, up to this hour, been allowed patents on frame designs for chainless bicycles—the broad interpretation of which is that only these concerns will engage in such construction. There is a woeful disparity between the much advertised and much incited desire to get into the game of manufacturing chainless bicycles and the actual work done to accomplish that end.—*Cycling Life*.

BICYCLE GEARS.

Many experts in bicycle matters think that the average of bicycle gears next year will be much lower than it is now. Riders have found that the race is not always won by the man with the big driving spocket, and that quite often a rider on a wheel geared to 68 or 70 will make much better time, and do it easier, than his neighbor who rides an 80 gear, and this regardless of the superior physique possessed by the rider of the higher gear.

A PERNICIOUS PRACTICE.

THERE are many things being done in the bicycle trade which are questionable, to say the least. A manufacturer lists his wheels at the highest possible price he can get conveniently for them. They are made of the best obtainable materials, and are called high-grade and listed, we'll say, at \$100. There is no question raised because a large percentage of the wheels are returned under the guarantee to be made good.

After months of untiring work the orders for wheels are about equal to the output during the early part of the season, and all goes along apparently smoothly. The poor dealer only has to suffer the brunt of the ire of his customers for wheels that do not stand up, and he loses his time and patience over many ridiculous misunderstandings of the public.

But a worse fate stares him in the face. He has a stock of these prominent high-grade wheels on hand, representing hundreds of dollars in value, on which he has signed a contract providing for its forfeiture, and in some cases for indemnity, if a cut in the list price is made by him.

The manufacturer, on the other hand, who holds these contracts, which are binding in law, goes to work after the flush of the season is over, cuts his list price and an-

nounces it to the world that his wheels can be bought for \$75, or a cut of 25 per cent. off the old list price of \$100.

This may be a scheme on the maker's part to get a lot of free advertising, and the more prominent the maker the more the cut in price will be talked about. It may be a shrewd move on the maker's part. But is it an honest one?

Here are hundreds of dealers who have his wheels in stock, who have sold a good number for cash and many more on the instalment plan which are not more than half paid up.

At once when the customers find that the price of their wheels has been reduced 25 per cent. they are not content to pay the balance of the instalments over and above the new price. In other words, they are not willing to pay \$100 for a \$75 bicycle.

If the manufacturers make the loss good to the dealer there is no question of unfairness, for then the dealer in his turn can satisfy his customer without loss; but if this is not done then it is a question of equity whether it is not a case of swindling, for if the maker can compel his agents to not cut his price, the maker's pledge to the dealer is inviolate to keep his part of that contract or make proper restitution for the resultant loss.

The effect of the price-cutting in mid-season goes further. It extends to the consumer who has bought and paid \$100 for his wheel and is compelled to suffer a loss of \$25 on the original value of his machine. He has no redress either from the dealer or the maker. The cut in price not being made by the trade in general the responsibility rests entirely on the manufacturer who cut his price to subvert some of his interests, and dealers and consumers ought to have redress through the courts to recover the loss caused by such uncompromising concerns.

WANTED SPICE OF VARIETY IN LIFE.

The expression of the editor's face showed that he was easily irritated, and the contractor into whose office he walked braced himself for trouble.

"I wish," said the irritable man, "that you would do me a favor in connection with the work on my house."

"Anything that we can do will be cheerfully attended to."

"Thank you. I wish you'd send a new man to do the painting."

"But the one we have there is an excellent workman."

"I don't doubt that. But he's been there three days and he hasn't whistled anything but 'Tell Them That You Saw Me.' I'm pretty slow at catching a tune, but I've learned that with all the variations, and if it's just the same to you I'd like to start in on a new one."—Washington Star.

CATALOGUES, BOOKLETS, ETC.

COPP BROS., Limited, of Hamilton, have certainly gone to great trouble and expense to present to the trade their Victorian catalogue for 1897-98, which has just been issued from the Empire Foundry. By a careful examination of the illustrations in this catalogue it will be noted that this firm have added a large number of new goods to their previously well assorted lines. Not only has the number of productions been increased, but in quality and finish improvement are claimed to be frequent where they have been warranted. Their line of Warrior stoves and ranges with this year's additions, Victorian and Princess, possess many advantages and attractions, not only in ornamentation, but in design and practical efficiency. As brilliant a success is predicted for the new lines as the Aberdeen range has attained since it was placed on the market two years ago. It sells because of its novel feature of being able to have all the nickel work excepting the legs removed in two minutes.

The catalogue of itself is a bound work of 130 large pages. Particular attention has been paid to the illustrations, and they have been brought out clearly on the good quality of paper used. This is not only so with the stoves, but also with the illustrations of the utensils and various appliances manufactured by the firm. The work is tastily arranged throughout. A bright idea in connection with the get-up of the Victorian catalogue is the pictures of the Queen and Lord and Lady Aberdeen on the back page of the cover. The first page shows their large foundry. Dealers in metal can secure one of these catalogues on application to the office at Hamilton.

AMONG THE RETAILERS.

Mr. M. M. Illis, of Williamsford, has arisen from the fire of last spring and again has a nice, clean, general stock.

J. B. Allan, who is in the hardware trade in Shallow Lake, Ont., started in business about six months ago and has already worked up a good business.

Mr. F. N. Lapan, hardware merchant, Owen Sound, Ont., has taken a partner. Mr. Lapan is going to Japan and China on a combined business and pleasure trip.

CHAINLESS BICYCLES.

It is asserted that ten thousand chainless bicycles will be put on the market next year by a prominent manufacturer. It is said there will be at least half a dozen makes of these wheels for sale, and the price will be \$100.

A manufacturer who has tested his chainless wheel over 8,000 miles of roads in all

conditions says the wheels will be of higher gear than the chain wheels and records will be smashed with them galore.

There are now several makes of chainless wheels on the market that list for \$100, but, judging from past experiences, chainless bicycles will sell for less than that figure.

ACTIVITY IN WAR MATERIALS.

It is in the heavy industries more than in the light trades that Sheffield holds her own. In war material there never was a time when so much plant and machinery were employed on the various kinds of work. All our large firms who make a specialty of offensive and defensive material are quite actively engaged, the only drawback being the hitch caused in several departments by the enforced idleness of the engineers. This applies more particularly to the planing departments in the armor-plate mills. Without their aid the armor cannot be finished. The stoppage comes at an exceptionally awkward time, for, after waiting the results of the trials of the new plates produced under the conditions laid down by the Admiralty of the type "made in Germany" by Herr Krupp, fresh orders for the whole of the side armor of four battleships had been placed with Messrs. John Brown & Co., Ltd., Atlas Works, and Messrs. Vickers, Sons & Co., Ltd., River Don Works. The latter company have obtained during the last three weeks some excellent orders for the new plates. These include work for the British Government, as well as foreign powers. One good "line" is for the plates of a large battleship now being built on the Thames. Messrs. Vickers have been commissioned by Her Majesty's Government to build a first-class battleship at their shipyard at Barrow-in-Furness, which they have now taken over and paid for. They have also been successful in guns, the company's design for a new 12-in. gun, with their patent mechanism, having been accepted in competition with other designs. A new 6-in. quick-firing gun, with the company's patent breach-loading appliances, has also been made for the Government, and the directors state that this gun has passed a most successful trial at Woolwich and Shoeburyness, a much higher velocity having been obtained from it than with any previously tried gun. In projectiles, the Hadfield Steel Foundry Company have succeeded in piercing Harveved armor plates, with two of 6-in. calibre, of special design and quality, fired with a velocity of 1,960 and 1,940 feet per second. A Hadfield armor-piercing projectile, 6-in. calibre, has also pierced a 9-in. special steel and water-hardened plate of Sheffield manufacture. Thus the battle of plates versus projectiles goes merrily on.—Hardware Trade Journal.



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253 Broadway

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NEW YORK

Catalogues and Price List on application.

PRICES GOING UP.

THE period of low prices for many of the goods used by plumbers and steam-fitters seems to have reached a point where there is an upward tendency. Meetings of the manufacturers of various kinds of goods have been held at frequent intervals during the summer. An advance has been noted in iron pipe, and during this week an advance in the price of fittings went into effect. An effort has been made to increase the price of the valves used by the heating trade, and, while some complaint has been made that all have not held out firmly for the advance, the disposition to secure a larger margin of profit is apparent. A line of goods which are likely to advance in price in the near future are the production of the boiler manufacturers, such as kitchen range boilers, expansion tanks and similar goods.

There met this week at Detroit several different associations of manufacturers closely allied to the heating and plumbing trades, and the object of these meetings is not only to secure a more remunerative price, but also adjust the methods of selling so as to be more satisfactory to the trade in general. There has always been a strong belief in all trades that large buyers should secure a better price than the buyer who requires but a small quantity. Complaints come from various quarters, in which it is said that a man can buy a dozen valves,

25 fittings or a few feet of pipe at about the same discount from the list as is secured by the man who orders his valves by the gross, his fittings in several barrel lots and pipe by the carload. With the buying capacity throughout the country very much reduced during the past few years, it was but natural that the manufacturer, in order to keep his plant running full, in disposing of the product would more persistently seek the buyer than is his custom when his time is occupied with producing and his product is distributed through the jobbers and wholesale houses. —Metal Worker.

DISCREPANCIES IN RATES.

There is a lot of dissatisfaction among cheese exporters at Montreal regarding the discrepancies in ocean freight rates from Montreal. The rate to Bristol, for instance, is 30s., whereas space to Liverpool and London is obtainable at 20s.

There certainly, to the lay mind, seems to be no reason why a shipment to the former port should pay 10s. more than to the two latter.

Another complaint is that Montreal is being discriminated against as a shipping point by the railway companies. For instance, they carry cheese to Boston from any point in Ontario for 2c. more than they will land it in Montreal. As ocean rates from the New England port have been only

half what they were from Montreal, quite a large quantity of Canadian cheese has been drawn to Boston for shipment. Exporters have got rates of 12s. 6d. from Boston, whereas the same shipments would have cost 25s. to 30s. from Montreal.

RUBBER-TIRED HORSESHOE.

A rubber-tired and noiseless horseshoe, which is expected to revolutionize horse running and racing, has been invented by a western genius, says an exchange. The shoe resembles the ordinary horseshoe, except that a circular rim of rubber is imbedded in its bottom. The inventor is John W. Monarch, formerly chief of the fire department of Des Moines, Ia. The rubber portion tends naturally to give the horse a much surer footing in climbing and descending steep hills or when traveling over roads made slippery by mud or ice.

A horse equipped with the new shoes was driven on one of the steepest hills in Des Moines recently by way of experiment. The animal was first driven down hill at a fast trot, and it was found that, instead of trotting with stiff knees, as a horse naturally would, the horse traveled almost as surely as it would on a perfectly level road. When the bottom of the road was reached the horse, while still trotting rapidly, was turned off sharply without making him slip or lose his footing. Experienced horsemen who have examined the new shoe declare that it is a boon.



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Incorporated 1895

SEAMLESS

Lithographed and Crystallized. No caps on corners to catch the dust or get pulled off. All new designs. Send for samples.

COAL HODS
STOVE PIPES
ELBOWS
FIRE SHOVELS, Etc.

THE THOS. DAVIDSON MFG. CO.
MONTREAL Limited

A MAN FROM REGINA.

MR. E. McCARTHY, one of Regina's general merchants, has been spending some days in Toronto. Mr. McCarthy went from near Guelph to the capital of the Northwest Territories about fifteen years ago, and it is seven years since he paid a visit to the east. He is a man who reads a great deal of commercial literature and keeps well abreast of the times. Like all Northwest people, his faith in the future of that part of the Dominion is strong.

"Trade, he said in answer to a question, 'will be better than it ever was. Prices for produce are good, and the farmers will be able to pay off their back indebtedness. Then the people in that country have had a lesson within the last few years which they have profited by: They do not buy implements so indiscriminately, while they have overcome many of their difficulties in regard to farming.'"

"Credits, too, are improving, are they not?"

"Yes, eight or nine years ago business was done on unlimited credit, but it is now nearly cash. What has helped us a great deal is the fact that the Government has undertaken to run the creameries. They buy the cream from the farmers and pay them cash for it every month. It has given quite a boom to the country. Now in regard to butter. Naturally, if there is a large amount of butter upon the market there is a glut of this article, which ultimately becomes of inferior quality. Now, however, the farmers in our part of the country are sending their milk to the creameries; and instead of getting 8 to 10c. per lb. they are getting 20 to 24c., and are paid in cash. They are thus able to pay cash for the goods required for the summer season. Then if the crops should happen to fail they are out of debt at any rate. In our part of the country is to be found the finest grazing ground in the world, and a good many people have made money raising cattle."

One drawback to the country, Mr. McCarthy contended, was the distance the farmers were apart. "There is only," he said, "about one farm, on an average, in about every five square miles. Out of thirty-six square miles there are only about fourteen square miles that can possibly be considered as open for homesteads, all the rest being reserved for the C.P.R., the Hudson Bay Co., schools, etc. As a result of this great distance between the farms the farmers cannot exchange work as they do in Ontario, which necessarily increases the cost of farming."

Mr. McCarthy, during the conversation he had with **HARDWARE AND METAL** re-

ferred to the departmental store evil, and said that even in Regina the merchants frequently had to regulate their prices by the catalogues of some of the Toronto departmental stores. He strongly urged that the departmental, and in fact all, stores, should be assessed on their turn over and not on their stocks. "Then," he added, "these department stores would be more careful in regard to cutting prices."

GOLD MINING COMES HIGH.

Scene—A mining broker's office on King street, Toronto.

Time—1st October.

Enter Rustico from Coboconk—(Barrel organ opposite door playing "The Lost Chord.")

Rus.—"I bought a block of Skwee-Jee mining stock in the Swelled-Head Development and Reduction Company, Limited, of Fakeville, B.C., at 13c. per share last month."

Bro.—"Yes."

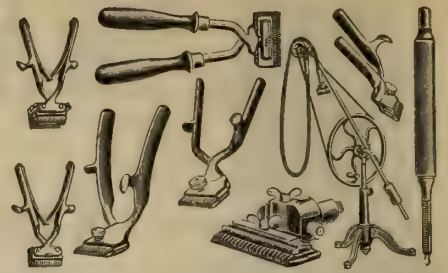
Rus.—"Well, you said on the 1st of October the price would be advanced to \$1 per share. I would like to sell out and salt away the profits."

Bro.—"Ahem! Certainly, my country friend, the price of Skwee-Jee has been advanced to \$1 per share; but alas! there are no buyers at any figure. Sorry, but would you like to purchase an employment agency, invest in some choice sand lots at Port Credit, or buy a chattel mortgage on an ice-cream freezer?"

Exit Rustico in great haste.—Tableau! Organ playing "Home, Sweet Home."

TO BUILD AN AIR-SHIP.

Last Monday work was begun on a new air-ship in Ottawa. Mr. J. de L'Etoile, who will superintend its construction, is the inventor of the ship, and of course has unbounded confidence in regard to its success. Two thousand five hundred dollars will be spent in the construction. The ship will be ready for its trial trip in four weeks. Mr. de L'Etoile states that the ship, if successful, will have a speed of 70 miles with a wind blowing 20 miles an hour. Sailing against the same wind he thinks it will have a velocity of 30 miles an hour. It will be constructed on the principles of a balloon and a ship. It will be a sort of a fish-shaped balloon. The same gentleman constructed a ship in 1869 and traveled some 125 miles in it. Since that time he has been working on improvements, and he is determined to win the \$50,000 offered by the Government at Washington to the first man who will sail an air-ship into that city.



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DERBY SNAP

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PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

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Catalogue

for

1897

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and Meakins & Sons, Hamilton.

METAL DEPARTMENT

*Brass Rod, solid and encased
Brass Tubing, solid and encased
Rope Tubing (Brass)
Copper Tubes*

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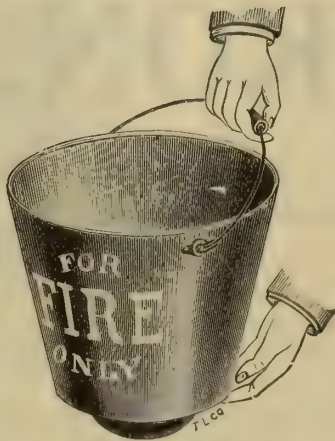
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THREE
WORDS**



in letters
of fiery
red

will make the careless employe pause when about to use Indurated Fibreware Fire Pails for chores. Besides, he couldn't if he would—the round bottom prevents their being used but “for fire only.”

The E. B. EDDY CO., Limited

HULL, MONTREAL, TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Oct. 1, 1897.

HARDWARE.

THE interesting fact of the week is a general feeling of unrest regarding values, owing to the advance in the cost of raw material. For this reason the quarterly meetings next week are awaited with considerable interest, as the fact that makers have withdrawn prices on bar iron inclines jobbers and buyers generally to the belief that there will be advances in other lines. On the other hand, values on plain and barbed wire are unsettled owing to the competition between makers, who are apparently entirely oblivious of the material advance in wire rods in the States and the difficulty they experience in getting orders for them filled.

BARBED WIRE—There is only a small movement in barb wire. Prices are unsettled, but \$2.25 f.o.b. here is still the price quoted in this market.

PLAIN WIRE—Values in this line are unsettled owing to competition between makers, and discounts have been quoted down to 30 and 10 off this week, with even less in some cases. This tendency is hard to reconcile

with the advance in the price of raw material in the States, as orders for wire rods are almost going begging.

WIRE NAILS—There is more enquiry for these, and a good volume of business has been transacted. Values, however, like wire, are unsettled, and we quote \$1.85 to \$1.90, f.o.b. Montreal, with 10c. per keg rebate to regular dealers.

CUT NAILS—There is a fair demand for these, and while no quotable change is to report, the tendency is firmer. We quote \$1.85 f.o.b. Montreal, Toronto, Hamilton and London, with 10c. per keg rebate to regular dealers.

HORSE NAILS—Demand for these has been more active, while discounts are unchanged at 50 per cent.

HORSESHOES—In brisk enquiry with prices as last quoted. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is a fair trade in these. Discounts are: Flat head, bright, 87½ and

10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Quiet and unchanged at 12½ per cent. discount.

BOLTS—In good enquiry and it will not be surprising if values should advance. Discounts are as follows: Common bolts, 70; full square bolts, 75; Norway carriage bolts, 75; machine bolts, 70; coach, 80; blank bolts, 60; sleigh shoe bolts, screws, 80; and plough bolts, 65 per cent. Square nuts, 4¾c. off the list, and hexagon, 5¼c.

RIVETS—There is a fair enquiry for these, and if raw material is any criterion values should go higher. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

HARVEST TOOLS—There has been a good enquiry for these.

SPADES AND SHOVELS—In good demand with discounts unchanged.

FILES—Steady with a good business doing.



YUKON...

TRIPLE HEATER

The most complete and effective heater made in the Dominion. Takes 30-inch wood.

Size of fire door opening 11 x 14¼ in. Shipping weight 460 lbs. Large hearth. 4-piece sectional linings that can be replaced through front door. Direct or indirect draft. Fire travels the entire length of stove three times before entering smoke pipe. Flues easily cleaned from front. Two very effective hot air flues that will distribute heat equally; one cannot rob the other. Strong leg base and nicked rails packed inside of stove for shipping.

List Price = \$33.68

Order a Sample Early.

THE McCLARY MFG. CO.

London Toronto Montreal Winnipeg Vancouver

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosse, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

The Wightman 403 St. Paul St.

Sporting Goods Co. MONTREAL

We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There is a good demand at the advance noted. We quote: Sisal, 7-16 and upwards, 5½c.; ¾, 6¾c.; 5-16 and ¼, 6¾c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7¾c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CHURNS—As last reported, discounts being unchanged.

CLOTHES WRINGERS—There has been some enquiry for these.

CARPENTERS' TOOLS—Assortments of these continue to move.

BUILDING PAPER—There has been more enquiry for this line and prices are lower than they were last week. We quote 25c. for plain building, 35c. for tarred lining, and \$1.30 to \$1.40 for roofing.

LEATHER BELTING—There is a good enquiry for leather belting.

WARE—A fair business is doing in granite and plain iron ware, also tinware.

HINGES—There is a good enquiry for these. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—There is a brisk trade in all kinds of cutlery.

SPORTING GOODS—The activity in this line is fully maintained.

SHOT—Firm, and a further advance is not unexpected. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent. trade discount.

CEMENT—Demand is good for cement, an active trade passing. Among the sales of the week have been several lots of Belgian, aggregating 5,400 casks; all on western account, at \$1.85. English cement is now quoted at \$2.05 to \$2.15, owing to the recent advance abroad.

METALS.

Trade in all branches of the heavy iron and metal market continues good, and values generally have a firm tone. Owing to the advance in raw material, makers of bar iron have withdrawn prices, and a sharp advance is anticipated, while jobbers here are asking more money on stock in hand than they did last week.

PIG IRON—There is a firm tendency to values. We quote: No 1 Hamilton, \$16; No. 2, \$15; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18 Ayrshire, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—Makers have withdrawn all quotations on bar iron, and jobbers this week are asking an advance of 5 to 10c. per 100 lbs. from stock, the range now being \$1.40 to \$1.50.

BAND IRON—The same firm tendency is

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

—MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNally & Co. - MONTREAL

noted in band iron, which we quote 5c. higher at \$1.70 base.

HOOP IRON—In the States prices have advanced \$2 per ton, or the equivalent of 10c. per 100 lbs., and we quote the base price \$2.25 to \$2.35 this week.

SHEET STEEL—Demand active and prices firmly held at \$2.35.

SHEET IRON—There is a good enquiry for all standard sizes, and prices are steady at \$2.25.

GALVANIZED IRON—An active enquiry is reported for galvanized sheets, and we quote: Queen's Head, \$4 to \$4.15, with other brands up to \$5.25, as to brand.

TINNED IRON—In good enquiry, and prices firmly held on the basis of 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges the usual extras.

LEAD PIPE—The strong feeling in this article continues, and prices have a still higher tendency. This fact has a quickening influence on the demand. We quote lead pipe 7c. per pound and composition and waste 7½c., subject to a discount of 27½ per cent.

PIG LEAD—There is a firm tendency in pig lead, and while we quote \$3.85 to \$4, values are strong at that range.

INGOT TIN—A fair business was put through during the week at 16c.

INGOT COPPER—There has been no change in copper, which ranges from 12 to 12½c.,

SHEET COPPER—In good enquiry. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—There has been more demand for iron pipe. We quote: Black pipe, ½-inch, \$2.50; ¾ to ¾-inch, \$1.90; ½-inch, \$2.35; ¾-inch, \$2.84; 1-inch, \$3.91; 1¼-inch, \$5.25; 1½-inch, \$6.66; 2-inch, \$8.97. Galvanized pipe, ¼-inch and ¾-inch, \$3.10; ½-inch, \$4.15; ¾-inch, \$5; 1-inch, \$7; 1¼-inch, \$9.70; 1½-inch, \$13; 2-inch, \$17.25.

CANADA PLATES—Continue in good enquiry with prices unchanged at \$2.10 to \$2.25.

TIN PLATES—There has been a fair demand for these. We quote: Coke I. C., \$3 to \$3.15; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.80.

TERNE PLATES—Demand good and prices steady on the basis of \$6. Stocks are again light in jobbers' hands.

BOILER PLATE—Unchanged at \$1.90 to \$2.

COIL CHAIN—Meets a good enquiry. We quote ⅝ up on the basis of \$2.85.

SHEET ZINC—Steady with a good demand at 5 to 5¼c.

SOLDER—Demand quiet, and in some cases prices have been shaded ½c. with sales at 11½c.

SPELTER—As last reported, at \$4.75.

ANTIMONY—Quiet at 9½ to 10c.

SCRAP IRON—There is a much firmer feeling in scrap, and sales have been made this week at \$13 for No. 1 wrought.

PAINTS, OILS, ETC.

There is a fair business doing in all kinds of colors. White lead rules firm, and a further advance in values would surprise no one. Turpentine continues strong, while linseed is in good demand.

WHITE LEAD—In good demand. We quote: Government standard, \$5.37½; No. 1, \$5; No. 2, \$4.62½; dry white, \$4.75.

RED LEAD—Business good, with prices steady: Genuine in casks, 4½c.; kegs, 4¾c.; No. 1 in casks, 4¼c., in kegs, 4½c.

LIQUID PAINTS—Demand continues good.

PUTTY—Demand active. We quote: Bulk, \$1.60; bladder in barrels, \$1.75; tinned in cases, \$2 per 100 lbs.

LINSEED OIL—Quiet and steady. Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Strong at the advance. Single barrels, 46c.; 5-barrel lots, 1c. less per gallon.

OILS—Demand steady, but moderate. We quote: Gaspé cod oil, 28 to 29c.; Newfoundland do., 33 to 35c., with sales of round lots for less money.

GLASS.

Though no quotable change is to report in the glass market, a much firmer feeling is to report owing to strong advices from primary markets, and higher prices are expected shortly. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Some sales of first pots have been made at \$4, but prices are now quoted: \$3.50 to \$3.60, and seconds, \$3.25.

CHEMICALS, ETC.

There is more enquiry for heavy chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Unchanged; lambskins, 50c. each, and beef hides 6 to 8c., as to grade.

PETROLEUM.

There is a fair demand for petroleum. We quote: Canadian, 13½c. in car lots and 14½c. in smaller quantities; American, 16½c. in car lots and 17½c. for small lots.

COAL.

Quiet and steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Makers have withdrawn all prices on bar iron owing to the advance in the cost of raw material.

Makers here state that their stocks of bar iron were never as low as they are at

Horse Shoes, "M" Brand, 1897

— WE MAKE —

IRON SHOES

"Light" Pattern in Nos. 0 to 7
"Medium" Pattern in Nos. 1 to 7
"Snow Shoes" in Nos. 1 to 6

X. L. STEEL SHOES

made only by us under registered trade
"New Light" Pattern in Nos. 1 to 5
"Extra Light" Pattern in Nos. 0 to 4



mark.

TOE WEIGHT STEEL SHOES, all forward in Nos. 1 to 4.

MONTREAL ROLLING MILLS CO., Montreal

N.B.—To distinguish our Shoes, please note, (1) all our Shoes are stamped "M" (2) All our kegs are branded on side of keg "M Brand, 1897."

We are the sole manufacturers in Canada of "X.L." Steel and Toe Weight Steel Horse Shoes.

Rock-Faced Brick

Sheets cover when laid $22\frac{1}{2} \times 17\frac{1}{2}$ inches. 37 sheets to a square (100 square feet).

Bricks are $7\frac{1}{2} \times 3$ inches.

Sheets are laid from LEFT to RIGHT, the narrow flanges overlapping the wide flanges.

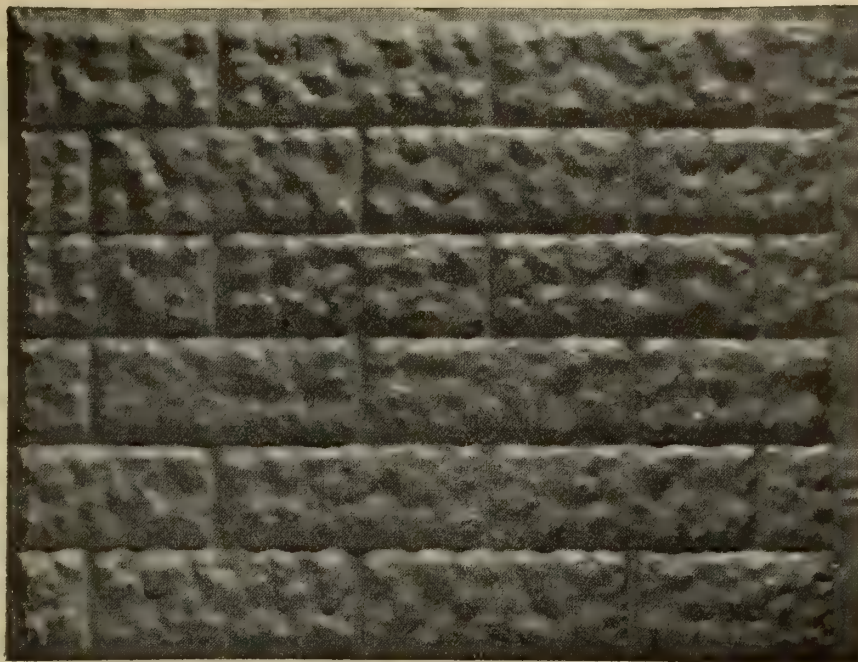
Illustration is an exact photographic reproduction of one single sheet.

This Siding (our latest production) is a very careful reproduction in sheet metal of the very best pressed Rock-Faced Brick, and cannot easily be distinguished from it.

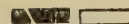
- CONSTRUCTION -

This Siding is so constructed that the sheets have a plain flange on all four sides, which overlap each other at the top and side. The overlapping flanges are the same width as those which divide the stones or bricks on each sheet, so that the joints are not noticeable, and every line of joint is crossed or broken.

In this way the objectionable features which characterize other makes of siding, where locks are used on the sheets, making an unsightly seam very unlike real stone or brick, are entirely removed in these Sidings, imparting a character to the work, and making them unquestionably the very latest improved and best up to date Sidings yet produced for covering the exterior walls of all classes of buildings.



Sole Manufacturers



THE METALLIC ROOFING CO. of CANADA, Limited

HEAD OFFICE AND FACTORY,

Cor. King and Dufferin Streets, TORONTO, ONT.

WRITE FOR QUOTATIONS.

The Originators and Pioneers and most extensive makers of sheet metal building material in Canada.

present. This is more particularly noticeable in the case of the smaller sizes.

There has been some cutting on plain wire, and one mill has increased its trade discount 5 to 10 per cent.

A letter from Cleveland this week stated that the mills had so much to do that orders for wire rods were absolutely going begging.

Hoop iron has been advanced \$2 per ton in the States. This means an increase of 10c. per 100 lbs. in the cost of importation.

ONTARIO MARKETS.

TORONTO, Oct. 1, 1897.

HARDWARE.

AS far as the volume of business is concerned there has been no material change since a week ago. It is still good. One wholesale house informed HARDWARE AND METAL that since June last there had been a steady increase in trade compared with the corresponding period of 1896. Business is certainly improving, and when the money received from the crops gets turned over this fact will become more evident. There have not been many changes in prices; the most important has been an advance of from 10 to 15c. per 100 lbs. in barb wire. Wire nails are still unsatisfactory as to price, but there is a good demand for them. Nice orders

are being booked by Toronto jobbers for sleigh bells, skates, table cutlery, table ware, plated ware, etc. Weather strip is beginning to move, and a good business is being done in building paper. Some business has also been done on lumbermen's account. Payments are improving.

BARB WIRE, ETC.—Prices have been advanced on barb wire, plain twist and staples, due to the higher figures ruling on the raw material. The ruling price quoted for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburgh.

ORDINARY FENCE WIRE—Business continues quiet, but prices are firm. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN TWIST—The improved demand noted last week appears to have been maintained. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—Although the United States market is firm on wire nails, locally the price is still low. The idea for Toronto, Hamilton and London is \$1.85 per keg, which is 38 to 40c. per keg below the cost of laying Pittsburgh nails down here in carload lots.

CUT NAILS—Trade is improving and

prices are steady. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is brisk. Discount, 50 per cent.

HORSESHOES—A good trade is to be noted in this line. We quote as follows: Iron, \$3.35; steel—No. 0, 1, 2, \$5.35; 3, 4, \$4.60; assorted, \$5.10; toe weight, \$5.80; all f.o.b. Toronto or Hamilton; f.o.b. London, \$3.40.

SCREWS—There is a firm feeling in regard to screws and it is possible, from what HARDWARE AND METAL can gather, that prices will be advanced shortly. Discounts are: Flat head bright, $87\frac{1}{2}$ and 10; round head bright, 80 and 10; flat head brass, $82\frac{1}{2}$ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Not much doing. Discount, $12\frac{1}{2}$ per cent.

BOLTS—A fair trade is being done. Discounts are as follows: Common bolts, 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and 5-16, 70 per cent.; ditto, $\frac{3}{8}$, 70 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 70 per cent.; coach screws, 80 per cent.; blank bolts, 60 per

cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, $\frac{3}{8}$ and larger, 4c. per lb.; 5-16, 5c. per lb., $\frac{1}{4}$, 6c. per lb.

RIVETS AND BURRS—Trade is fair. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to $2\frac{1}{2}$ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Business is moderate. Discounts are $17\frac{1}{2}$ per cent.

ROPE—Trade is fair at last week's decline in price. We quote: Sisal, 7-16 in. and larger, $5\frac{7}{8}$ c.; $\frac{3}{8}$ in., 6c.; $\frac{1}{4}$ and 5-16 in., $6\frac{7}{8}$ c.; 3-16 in., $7\frac{3}{8}$ c. Manilla, 7-16 in. and larger, $7\frac{1}{8}$ c.; $\frac{3}{8}$ in., $7\frac{3}{8}$ c.; $\frac{1}{4}$ and 5-16 in., $8\frac{1}{8}$ c.; 3-16 in., $8\frac{3}{8}$ c.; deep sea line, $13\frac{1}{2}$ c. for water laid, and $14\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—A marked improvement is to be noted in the demand for churns, although no large quantities are moving. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Business is much about the same as a week ago. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—A fair trade continues to be done. Discount, 45 and $2\frac{1}{2}$ per cent.

BUILDING PAPER—Orders are coming in with increasing freedom. Prices are unchanged. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.

LEATHER BELTING—Trade is being well maintained. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—Trade in tin and granite ware is still active, although the orders are not as large as they were.

CUTLERY—Business continues good, and the demand is for a general assortment.

SPORTING GOODS—Business is still brisk, guns, rifles, ammunition, etc., going out well.

HINGES—Trade remains fair. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

BUILDERS' SUPPLIES—The improvement noted last week has been maintained.

CEMENT—No improvement in the de-

STANDARD of
AMERICA
for
30 Years



NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

For Sale by Jobbers.

mand has been noted this week. Dealers are disappointed, as a good fall trade was expected. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10; calcined plaster, \$1.90 per barrel.

METALS.

The rolling mills have withdrawn quotations on bar iron. This is the chief feature in metals locally to note. Galvanized iron is scarce. The demand for sheet steel and black iron shows some improvement. The same may be said of ingot copper.

PIG IRON—The market continues strong at firm prices.

BAR IRON—Quotations have been withdrawn, but buyers say they can still purchase at the old figures. We quote base price at \$1.40 in carload lots at Toronto and \$1.50 in smaller quantities.

HOOP AND BAND IRON—Some good sales have been made and in general trade is good. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$20.

SHEET STEEL—The demand has increased again and a fair trade is reported in both Nos. 1 and 2 qualities. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24,

\$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Is moving more freely and prices rule steady. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade continues decidedly active, and jobbers find the demand for American iron exceeding the supply. Stocks of English iron also exceed the supply in the lighter gauges. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{3}{8}$ c.; 18 to 24, \$3.87 $\frac{1}{2}$ c.; 26, $4\frac{1}{8}$ c.; W. G. 28 gauge, \$4.37 $\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{7}{8}$ to $7\frac{1}{2}$ c. per lb.

LEAD PIPE AND TRAPS—Are in good

demand. We quote as follows: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD—A few fairly good shipments were made this week, but in general trade has been rather slow. We quote 4 to 4½c. per lb.

SHOT — Business continues good. We quote: Dropped shot, 6c.; chilled do., 6½c. buckshot, 7c. Discount, 12½ per cent.

SOIL PIPE—Trade is moderate. Discount is 60 and 10 per cent.

INGOT TIN—Trade is brisk with quotations unchanged. The outside markets are steady. We quote 16¼ to 16½c. per lb.

INGOT COPPER—Has been moving a little more freely, but no sales of large lots are reported. The ruling idea as to price is 12½c. per lb.

SHEATHING COPPER—Trade is fair. Braziers' is quiet. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE — Is moving slowly. We quote: Wrought, ¼ to ¾ inch, 1½c.; ½ inch, \$2.25; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

RANGE BOILERS—Business continues good. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Are in strong demand, particularly 60 to 75 sheet boxes. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—Trade is fair, but quantities moving are not large. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—These are still moving

freely, particularly I C. We quote: I C, \$6 to \$6.25; I X, \$7.50.

COIL CHAIN — Quiet. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET LEAD—Is now quoted at 4¾c. f.o.b. Toronto, with 10c. per 100 lbs. advance for Hamilton.

SHEET ZINC — Demand is fair. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER — Business is moderate. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Is moving a little better, but business is far from being brisk. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

OLD MATERIAL.

The fact that the iron trade is dull is by no means an assurance that this line is featureless. On the other hand it needs careful watching. The advance of \$2 per ton in wrought scrap in the States is likely to cause the mills in Canada to raise their prices. Material throughout the country will then be called in. Dealers say that

The Secret

All successful business men make their money by turning it over fast

TO DO THIS you must buy only
Up-to-date
Quick Selling GOODS.

The attractive appearance of...

Moore's NEW BERMUDA
NEW FLORIDA

catch a customer's eye at once.

An examination of their many points of SUPERIORITY SELLS THEM.

Their durability, economy and perfect operation recommend to you another customer.

These are profitable goods to handle.

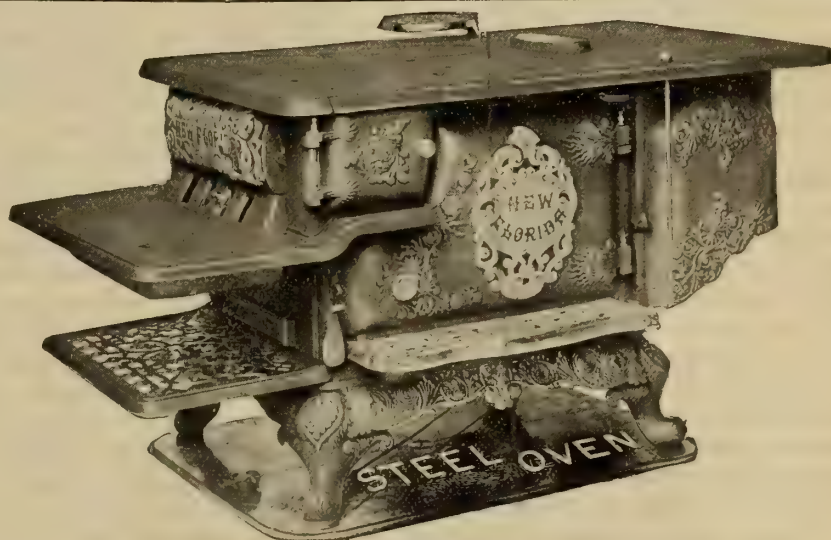
Manufactured by

THE D. MOORE CO.

Limited

HAMILTON, ONT.

Watch for our Double Heater, TODD.



this rise is no sudden jump from which there will be a reaction. Pig iron in all markets is rising, and scrap is sure to be in sympathy. Woolen rags are in good demand, while cotton are slow to move. Tin and copper are somewhat easier in the States and, consequently, on this market. We quote as follows. Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 7¾ to 8¼c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 5½c.; heavy red scrap brass, 6¾c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3 to 3¼c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c. per 100 lbs.

GLASS.

Business has shown much improvement this week and dealers hope that the fall rush has begun and will continue. Some complaints have been made to the effect that cutting of prices has been indulged in, but an investigation has failed to discover any ground for the same. We quote: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

PAINTS AND OILS.

With brilliant sunshine and good prospects, the trade in paints, oils, and varnishes is holding up remarkably well. The advance last week of 1c. in linseed oil, and 2c. in turpentine, has served as a stimulus, and there is not so much caution being evinced in purchasing. Mortar stains are being enquired for. All lead products are steady at the advance, and white lead will likely reach the 5¾c. mark before the end of October. The carriage trade is placing some fair orders for material for vehicles, including sleighs. Putty is shipping freely and will likely be much higher. Dry colors are being shipped in fair volume. In japans and varnishes, the demand is steadily improving, and if there was less reckless cutting by firms who treat the varnish trade as if they were selling pig iron and metals, not taking into account the loss by evaporation and waste, this industry would be on a more satisfactory footing. Glues are stiffening in price on account of scarcity. The importation of German glue is becoming lighter. Local manufacturers are experiencing great difficulty in getting stock for manufacturing purposes. Turpentine has risen 1c. this week.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—26c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 49c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—Market is firm owing to the scarcity of hides, and it is only this fact that can keep the price up, as tanners find the present quotations too high to handle many. Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—Trade continues fair. Not much stock is coming forward. We quote; No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 65 to 75c.

WOOL—Trade in wool is quiet, and it will not recover from the severe strain that has been imposed on it this year till next season. The factories in Canada are causing an increased demand, and as this demand comes on a bare market, prices are firm and high. Dealers are paying 20 to 20½c. for pulled wools.

SEEDS.

The week has developed nothing new in the seed line. Some few lots of last year's alsike changed hands at high figures, while

sales of this year's crop are also reported. Values of alsike range from \$3 to \$4.50 per bushel. Red clover is now quoted on the basis of \$3.25 to \$3.50 per bushel. This is determined by foreign values. Timothy, as was stated last week, will be exported this year, and consequently prices will be lower to compete in foreign markets. Formerly timothy was imported, and thus the difference in the price this year and that of former years will be twice the freight rates. At present, offered goods range from 90c. to \$1.25 per bushel for machine-threshed, and flail-threshed is somewhat higher.

PETROLEUM, ETC.

The demand for all grades of petroleum is increasing, and fall orders are arriv-

TO RENT.

A FIRST-CLASS BUILDING, LARGE AND COMMODIOUS, with modern improvements, suitable for Dry Goods, Groceries or Hardware. Apply to A. Warnock, Galt, Ont.

BUSINESS CHANCE.

PARTNER WANTED IN A GROWING HARDWARE business in a live town in B. C.; one who can command a capital of \$5,000 and not afraid to rustle; correspondence solicited. Address, J. V., care HARDWARE AND METAL, Toronto. (40)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Going to Retire?
Want to Sell Out?

If so, say so in **HARDWARE AND METAL**.
It reaches the most likely buyers. Two cents a word each insertion.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales
made and repaired.

Write for Catalogue.



CUTLERY H. BOKER & CO.

TREE



BRAND

RAZORS,

SCISSORS,

PENKNIVES

Caverhill, Learmont & Co.

MONTREAL

ing freely. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

All dealers are busy delivering coal this week; in fact, it is one of the busiest weeks of the year. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46.

MARKET NOTES.

Putty is tending higher.
Barb wire has been advanced to \$2.30, Toronto.
Sheet lead is now quoted at 4¼c. f.o.b. Toronto.
Turpentine is quoted 1c. higher this week in sympathy with the rising prices in the south.

Stewart & Wood have a shipment in glass in this week that will take four or five days to unload.

"Hardwaremen should keep their eyes on screws," remarked a wholesaler to HARDWARE AND METAL. "They may advance when least expected."

H. S. Howland, Sons & Co. are in receipt of their first shipment of German skates this season. The finish and quality is understood to be better than last year.

Wrought scrap iron has advanced \$2 a ton in the States. When the supplies of the mills here are exhausted it is expected that the prices here will be raised to call forward a sufficient supply.

H. S. Howland, Sons & Co. are in receipt of the largest shipment they have ever had of Elliot's cutlery. The shipment consists largely of butcher knives, carvers and table and dessert knives. Butcher knives are in good demand at the moment.

The Canada Paint Co. are issuing a neat card drawing attention to their triple-strength colors in paste form, ground ready for use. Their utility and usefulness is very evident, and, it is said, they are meeting with a large sale for tinting white lead.

UNITED STATES MARKETS.

NEW YORK, Oct. 1, 1897.

PIG TIN.—London sent somewhat better cable quotations which along with some improvement in the demand served to give the market rather more tone. The stock on offer proved too large, however, to permit of any substantial rise in prices. In fact, purchases were made easily at yesterday's figures. Five-ton lots at the close where about 13.65c. ex ship or store and 13.70 to 13.75c. free on board.

COPPER.—Ingot remains very steady at 11¼ a 11¾c. for Lake Superior ingot, 11 to 11½c. for electrolytic and 10¾ to 11c. for casting stock. Export movement keeps up well and is still the main support of the market, but purchases for home account are still confined mostly to moderate quantities. London cable quoted a dull specula-

tive market there and very little change in prices.

PIG LEAD.—The market was firm, with 4.32½c. bid and 4.35c. upward asked. Dealings were mostly of small size and involved only a few carloads all told. London cable quoted at £13 17 6d for soft Spanish.

SPELTER.—Dealings are still moderate in this quarter, and the demand continues slow, but prices remain very steady at about 4.30 to 4.35c. for delivery here or at common point.

ANTIMONY.—In a jobbing way business is fair, and prices remain at 7 to 8¼c., according to brand.

TIN PLATE.—Quite a brisk business was effected in American cokes for delivery well into the first quarter of the next year, and the market is showing better tone. Otherwise dealings are moderate and mostly at old prices.

IRON AND STEEL.—Business was hardly as good as it has been of late, but there is still considerable negotiation in various departments and prices hold very steady.

MANITOBA MARKETS.

WINNIPEG, Oct. 1, 1897.

BUSINESS is good and steady in many lines, but there is no change in the situation. Such fine weather for threshing has never been known in the history of the country. From the first day of September up to the present date there has not been a single bad day. The quantity of wheat already threshed is enormous, and cars are scarce and elevators full. The only change reported is that white lead has gone up to \$2.25, and the increase in linseed oil of 2c. per gallon.

AMMUNITION.—A great deal of shooting has been done this season. It would not, perhaps, be truthful to say a great many birds have been shot, but much powder and shot have been given to the prairie, and if the prairie hens still sit securely, so much the better for the powder trade next year. It has been ideal weather for shooting, and many have taken advantage of it. Dealers in sporting goods report an unusually active season, with Robin Hood smokeless in very steady demand at \$18 per 1,000 for 12 gauge, with the usual extras for 10-gauge and shells loaded with chilled shot.

BELTING.—This article in all lines is still selling well. Discounts, same as last writing, 60 and 10 per cent. for Lion and Star, 50 and 10 per cent. for Redstrip and extra heavy Star.

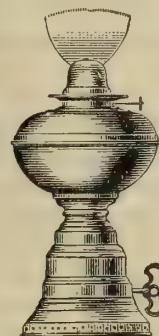
NAILS.—Business brisk and prices unchanged on basis of \$2.65 per keg. Cut nails are also in good demand at \$2.50.

A POWDER MAN MARRIES.

Mr. T. L. Gallagher, manager of the Toronto branch of the Hamilton Powder Co., was married at Niagara-on-the-Lake on Wednesday. The bride was Miss Alice M. Squarey, and the nuptial knot was tied in St. Mark's Church by Rev. J. C. Garrett. The happy couple left on an extended honeymoon trip throughout the Western States, and on their return will take up house at 142 Carlton street. Congratulations, Mr. Gallagher.

BUSINESS WANTED.

WANTED AT ONCE FOR CASH A THOROUGH going Hardware Business in good town or village; must stand closest investigation; give full particulars. J. E. Pedlow, Vienna. (40)



**Improved
Wanzer
Lamp**

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER.

**WANZER LAMP & MFG. CO.
HAMILTON.**

If you want the straightest and most durable **Rawhide Whips** in the market, order our

Napoleon and Monarch

WHIPS

Every Whip Guaranteed.

Patented and made only by . . .

HAMILTON WHIP CO.

119, 121, 123 Mary St., HAMILTON.

Cheap Whips of Every Style.

**Manufacturer's
Agents
Wanted.**

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary:

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

MACHINERY AND MECHANICAL DEPARTMENT.

THE LUBRICATION OF STEAM ENGINES.

THE ENGINEER, London, has lately given us something to think about on the use, and especially the cost, of oil used in engine rooms. The fuel cost is too frequently all that is considered in connection with the engine, but the oil bill should also be watched. An American engine is mentioned, high speed horizontal, and 13 or 14 horse-power, running where coal was very cheap, the cost of the coal being only 36c. per day, while the cost of the oil used was 84c. per day. Another engine, 1,500 horse-power, used 120 gallons per week, while triple expansion marine engines of the same power get along with 20 gallons a week. The price per gallon in England for oils used for the same work of lubrication varies all the way from 60c. per gallon to 18c.

Engineers may be careless and waste much oil; the rubbing surfaces of the engine may be insufficient, or, through neglect, they may have become scored and roughened, and therefore need much oil to keep them cool; the oil may be entirely unsuitable for the work; or the engine may run in dusty places, so that the oil, besides lubricating, is used to wash the grit out.

The various ingenious lubricators so widely used, most of them do anything but save oil. The sight-feed lubricators are said to be great sinners. They feed a drop at a time, but the drops are as big as marbles, and we heard lately of an engine, not large, where they were feeding forty drops a minute into the steam chest.

Circulating oil pumps, as generally used, are sharply condemned. The pumps collect and lift the oil to a tank above the engine and use it over and over. More or less water always mixes with the oil, and the mixture is churned in the pumps, with the addition of dust, fine brass from the bearings, coal, etc., and however fine it may be to begin with, it soon becomes a filthy looking, slimy brown fluid, which is anything but a good lubricant.

How to secure the best lubrication is one thing, and how to secure sufficient lubrication most cheaply is quite another. For the latter it is thought that, on the whole, nothing can excel a good oil-can in the hands of a competent and judicious man. It is, however, far easier to buy self-acting lubricators than to find reliable men; so the lubricator business is likely to continue to prosper.

There are certain obvious qualifications which lubricators should possess. They should not blow oil all over the engine room every time they are filled; there

should be no possibility of their being clogged up; they should have no delicate mechanism, and they should work well with different kinds of oil. They should be strong, with no chance of leaking, and the cocks should never jam. The screw threads of removable caps ought to be of such a kind that the caps will not stick or jam the threads; the pipes should be free from sudden bends.

Much of the waste of oil is due to the lack of knowledge of the art of lubrication. If an engine is kept in perfect order, it is astonishing how little oil it can get along with. Bearings and cylinders seem to have a power of accommodating themselves to almost any condition of lubrication. If an engine has become habituated to much oil, time and patience may be needed to reduce the quantity; but if an engine begins its life with a sparing use of oil, it may be moderate in its demands to the end.

A lavish use of the oil-can may hide defects which should not exist. Guide bars become scored, and instead of refacing them, they are kept cool with oil. End brasses are set up a little too snug, and oil is poured on like water until sufficient wear has relieved the pin. Engineers should be looked after. They may waste oil, and if restrained they may go to the opposite extreme. The premium system has been tried, but does not seem to have proved satisfactory. It is possible, however, that some modified premium system might show good results.—American Machinist.

NOTES.

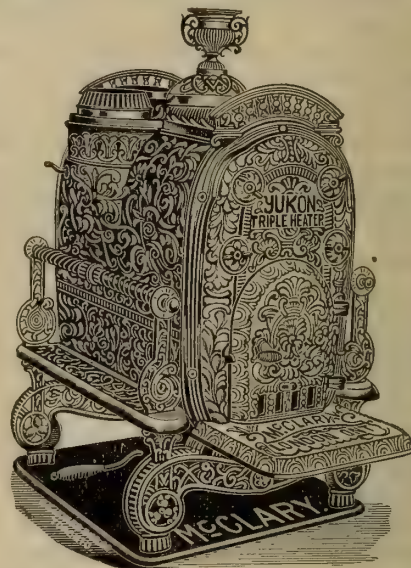
A horrible accident occurred in New York the other day in the station of the Edison Electric Illuminating Co., on East Twelfth street. Electricity, in this case, was not directly the cause of the catastrophe. Two brothers, tinsmiths, were soldering the covering of a platform between the fly-wheels of two high-speed engines belted to dynamos. The space was narrow, and the work, done on hands and knees, was very fatiguing. When near quitting time, six o'clock, William Jessup for a moment raised his arms to stretch himself, by way of relief, when his coat or some part of his clothing caught between belt and pulley, and he was whirled to instant death.

Forty-five pages of The Patent Office Gazette of August 31 are occupied by the claims of 30 additional patents to Francis H. Richards, of Hartford, Conn., for automatic weighing machines. The total number of Mr. Richards' patents, issued and pending, in this one line, is now 240, with more to follow. It is said at the patent

office that a certain examiner-in-chief is getting into the habit of ejaculating, "Give us this day our daily weighing machine."

A NEW STOVE.

The accompanying cut shows the "Yukon" Triple Heater, for wood, made by the McClary Manufacturing Co., of London. A large cut of this stove, giving description, is shown in the advertising columns of this issue. A stove of this kind is equal to a small furnace for heating a home, school-house, or public



building and is very economical on fuel. The carving on this stove is excellent, surrounded by a tasty display of nickel-plated parts. It is a handsome ornament to any home. The McClary Manufacturing Co. are very busy supplying samples to their dealers, but hope to have a full stock within a few days.

TINNED STEEL WIRE.

The Montreal Rolling Mills Co. has gone into the manufacture of all lines of tinned steel wire, and a revised list, as follows, has been issued:

Gauges.	per 100 lbs.	Gauges.	per 100 lbs.
Nos. 8-9.....	\$5.75	22.....	\$ 7.80
10.....	6.00	23.....	8.00
11.....	6.00	24.....	8.50
12.....	6.50	25.....	9.00
13.....	6.50	26.....	9.50
14.....	6.50	27.....	10.00
15.....	6.60	28.....	10.50
16.....	6.75	29.....	11.00
17.....	6.90	30.....	11.50
18.....	7.00	31.....	12.00
19.....	7.20	32.....	13.00
20.....	7.40	33.....	14.00
21.....	7.60	34.....	15.00

EXTRAS—NET.

	per 100 lbs.
In 50 and 100 lb. bundles net.....	5 cents
In 25-lb. bundles	10 "
In 1-lb. hanks.....	50 "
In ½-lb. hanks.....	75 "
In ¼-lb. hanks.....	\$1.00
Packed in casks or cases.....	15 "
Bagging and papering	10 "

THE COAST RAILWAY.

THE Halifax Board of Trade has strongly resolved in favor of the early construction of a line of railway between Halifax and Yarmouth, touching at the most populous sections along the coast. The specific and business-like resolution was passed last Tuesday evening.

It expresses the opinion that a line of railway along the southwestern coast would be of great benefit to the province generally and to the city of Halifax in particular. It approves of the road taking the shore route, thus serving a thickly-populated section of country which has the additional advantage of having diversified attractions for tourists. It recommends the providing of the usual subsidies by both local and federal Governments, and it expressly stipulates that the road should start at a point not further from the city than Bedford.

The Coast Railway Co. have a charter to build a road along the south-western shore from Yarmouth to Halifax. Thirty-one miles of that road are now completed, and the contract has been awarded for the construction of another twenty miles, which will bring the road to Barrington. They hope to have that work completed by the end of the year. They propose, if they receive the necessary encouragement, to push the work on to Halifax through the principal shore settlements. The operating of the thirty odd miles at the other end of the line is doing a big thing for the business men of Yarmouth, and to begin at Halifax would mean advantages for this city.

HARDWARE BUSINESS NINETY-SIX YEARS AGO.

Not only was the field of business enterprise restricted, but the transaction of business within that field was slow and difficult. The merchant kept his own books, or, as he would have said, his own accounts, wrote all his letters with a quill, and when they were written, let the ink dry or sprinkled it with sand. There were then no envelopes, no postage stamps, no letter boxes in the street, no collection of the mail. The letter written, the paper was carefully folded, sealed with wax or a wafer, addressed and carried to the post office, where postage was pre-paid at rates which would now seem extortionate. To send a letter, which was a single sheet of paper, large or small, from Boston to New York or Philadelphia, cost 18¾ cents, and to Washington 25 cents, and this at a time when the purchasing power of a cent was five times what it is at present. To carry a letter from Philadelphia, then the capital of the United States, to Boston and bring back an answer by return mail, would have consumed from twelve to eighteen days, according to the season of the year and the weather.—Atlantic Monthly.

HARDWARE DEALERS' MAGAZINE

Largest Circulation in its field in the World

One Dollar
a Year.D. T. MALLETT, Publisher
271 Broadway, New YorkSpecimen
Copy upon
Request**Baylis Manufacturing Co.**

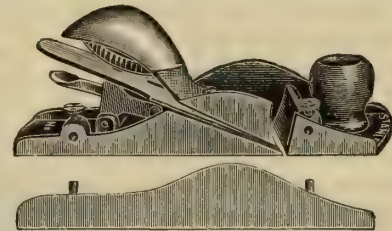
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VARNISHES
WOOD FILLERS
OILSJAPANS
WHITE LEAD
AXLE GREASELACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

IMPROVED
Labor-Saving
**CARPENTERS'
TOOLS.**
STANLEY
RULE & LEVEL CO.
New Britain, Conn.

SOLD BY ALL
Hardware Dealers.

STANLEY'S RABBIT AND BLOCK PLANE.

A detachable side will easily change this Tool from a Block Plane to a Rabbit Plane, or vice versa. The cutter is set on a skew.

No. 140. Rabbit and Block Plane, with detachable side,
7 inches in length, 1¾ inch cutter \$1 25

**INSURE YOUR LIFE IN THE
CONFEDERATION LIFE ASSOCIATION****The right man**

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the **UNCONDITIONAL ACCUMULATIVE** Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only--that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE—TORONTO.

W. G. MACDONALD,
Actuary.

J. K. MACDONALD,
Managing Director.

AN ANCIENT'S ADVICE.

THE man who fails to take a vacation does an injustice to himself, his family, his employes, his country and his God, writes A. N. Oldman in N.Y. Hardware.

This may seem a little strong language, coming from one whose hair is silvered with the frosts of many winters in a hardware store, and whose feet, if not in the grave, are standing upon the edges thereof. But it is out of this old age, and the experiences which it has gained for him, that I feel justified in making as strong a statement as that contained in the above.

When I was a boy, those in the mercantile class did not know what a set vacation was. When I served as a clerk, we opened the store at 7 o'clock in the morning and kept it open until 9 o'clock at night, 365 days of the year, with the exception of Sundays; and the old man for whom I worked would have run her right open all day Sabbath, if the community had approved of such procedure, and had come to buy. When a town was filled with strangers and merry-makers, on the 4th of July and other days of jubilee, we boys were kept back of the counter from morning until night, and a request for the closing of the store on such occasions would have been almost equivalent to handing in our resignation. I believe we did shut up on Christmas day, but not on Thanksgiving or New Year's.

If one of the boys wished a day off, once or twice a year, for some special occasion, such as a picnic or the burial of a grandmother, he could sometimes obtain it, provided he stood high in the graces of the old man. The person who had been filled with a sufficient amount of hardihood and desperate courage to have suggested two weeks' vacation to each of the employes during the summer months would have been looked upon as a spendthrift, or one in whose head more wheels had been generated than were necessary for the proper origination and propulsion of his ideas.

I have three clerks in my store, in addition to a young lady bookkeeper and stenographer, and I wish to tell you merchants that I would regard it as a piece of almighty poor business policy, if I did not give each one of these a full two weeks' vacation each year.

In the first place, I see that they earn it during the remaining forty-eight weeks. In the second place, I get more good value out of them in the course of the year than I could if their noses were kept at the grindstone during the whole period. In the third place, no man has a right morally, religiously, economically or patriotically, to cheat a fellow being out of that which is his natural due; and I believe that in the

economy of this universe, God as much intended that the hardware clerk should have a period of bountiful rest in the country, among the trees and flowers, and the thousand and one attractions that a man meets when away from brick and mortar, as He intended that the flowers, and the trees, and the birds, and the running brooks and good fishing, should be scattered promiscuously through this broad land of ours, with an invitation to man to go forth and enjoy them.

I always take two weeks' vacation myself, and am the better man because of it. Sometimes my family go with me, and sometimes I go alone, but in either case I come home invigorated, and with a better opinion of things in general, a warmer side toward humanity, a more comprehensive grasp of my business, with more kindness and love towards my immediate associates, a fuller and broader comprehension and understanding of my duties as an employer, a father, a citizen, a Christian and a man.

HONESTY THE BEST POLICY.

Once I was young and now I am old, yet have I not seen the righteous forsaken, not his seed begging bread.

The above is not an exact quotation from the Scripture, in all probability, but is as near as memory will permit me to recall it. The sentiment is all there, however.

There never was a truer truism—if the expression may be used—than the old saw: Honesty is the best policy.

I admit that it does not occupy the highest moral grounds. It does not say that one shall do right because it is right. It does not say that one shall render his neighbor full due because it is Christian—Christ-like—to do so. It does not touch the higher plane of pure morality at all. It simply says that one shall be honest because it pays. Because it is politic to do that which is fair and right.

And it does pay. The truth of this is proved by the history of every honest man, and by the history of every dishonest man.

I do not say that all honest men do well in business, and all dishonest men fail. Not by a long shot. There are honest men in the alms house; there are thieves who lie on velvet and eat from silverware.

But when all things are weighed and measured; when the balance is struck all around; when the average of men's lives is made, you will find that it pays one to do that which is right, in business matters, as in all others. The asset of good character and a clear conscience is the best holding one can have at the end of life.

AS TO LIES.

If you must lie, do it artistically.

A business lie may be a pretty thing to look at, but unsafe to handle.

Is a business lie ever justifiable? I would like to hear from some of the experts. I know a lot of them.

If you lie to a customer, and the clerk knows it, has the clerk a warrant for falsifying to you?

I know a youngster who said: "Dad licks me when I tell a lie. I want to grow up so I will have a right to tell lies—same as he does."

Can a man be a good deacon in a church and at the same time a good salesman?

Where does the lie come in between business diplomacy and outright falsehood?

A great deal may be said about the advantages of always telling the truth. Can anything be said on the other side?

CUTE JAPANESE.

"The Japanese are getting too cute," said George Bradshaw, of London, at the Palmer recently. "They are the cleverest people in the world, I believe. Last winter I traveled all through the land of the Mikado. We arrived at Yosaka one day, and it is quite a small town. We did not know where to stop. There were a number of inns, and we were asked to stop at each one that we passed, but I didn't like the appearance of them. Presently we ran across a neat, tidy place that looked quite English. There was a big sign in front like this:

.....
ENGLISH, GERMAN AND FRENCH
.....
SPOKEN HERE.
.....

"That suited us, for we were obliged to communicate with some one in the village, and we could talk but little Japanese. Soon after our arrival we asked for the interpreter.

"'Pardon, master,' mumbled the landlord in cracked English, 'but I have none now.'

"We were just able to understand him. He knew a few English words and we knew a few Japanese.

"'No interpreter?' we exclaimed.

"'No.'

"'Your sign says that all languages are spoken here.'

"'They are.'

"'By whom?'

"'The guests. We have all kinds at different times.'"—Chicago Herald.

WHITE LEAD IS FIRM.

Cable advices regarding the situation in white lead would lead one to believe that quotations here would be advanced before the end of the month to \$5.75 for pure ground lead. Quotations given now are for immediate acceptance only.

PERSONAL MENTION.

Mr. James W. Lee, of the Canada Paint Co.'s Toronto staff, has been laid up with a violent attack of influenza. He is now convalescent, and expects soon to canvass the hardware trade with his usual vigor.

An effort is being made in Toronto to fix the price of putty, as the present figures are so low, it is claimed, as to leave no margin of profit to the dealers. This will likely be a good week to lay in any necessary supplies of the product.

THE SMELTING QUESTION.

THE vast coal fields in the neighborhood of the Crow's Nest Pass, upon the completion of the railway between Lethbridge and Robson, will furnish smelters of this district with as much coal, or coke, as may be necessary, and at a very satisfactory rate. The very best fuel delivered at Columbia river points, at a cost not to exceed \$5.50 per ton, or one-half the present price, will leave little to be desired in this respect by local reduction works. In the meantime, however, Canadian railways and Vancouver Island collieries are shipping fuel to Kootenay smelters at less cost than United States railways and Washington collieries can deliver coal and coke at Northport, or other points south of and near the international boundary.

In view of all this, and knowing that the necessary fluxes for economical smelting abundantly exist in this district, it can only be surmised that certain American owners of British Columbia mines are influenced by some extraordinary conditions in their determination not to do their smelting on this side of the line. Is it American railway influence, or the glamor of Washington state politics that induced the principal stockholders of the Le Roi company to build the Le Roi smelter at Northport? We all know that the Corbin system of railways thrives at the expense of Canadian transportation lines. We also know that the president of the Le Roi Mining Company is fascinated by a senatorial toga. Has Mr. Corbin arrived at the conclusion that he must rob this country of a great industry in order to reap fat profits from his railway, and so quoted a secret rate for hauling ore that is a trifle over the bare cost of transportation; or is Judge Turner so anxious to sit as a member of the Yankee house of lords that he is willing to "slough" considerable hard cash, in building up an important American industry, that would otherwise go into the pockets of the Le Roi stockholders? These are interesting questions. The mine owners, merchants and laborers of Kootenay are commencing to realize very forcibly that they are reaping no particular benefits from United States smelters. They want local reduction works that would admit of low freight and treatment rates, and that would create a great opportunity for trade and employment. —Miner, Rossland.

SHOULD TAKE HIS KIT OF TOOLS.

▲A wheelman should never start on a country run without his full kit of tools. He should see that he has plenty of cement in stock for possible punctures, and that the pump and other tools are in good condition. Depending on those you meet on the road for the loan of tools is pretty much like depending on a free lunch counter for your dinner

Save Money.

Boeckh's Patent Flat Bridled Brush will make money for you and save money for Painters. It covers the most surface and does cleaner work because it doesn't bulge in the centre. Illustrated catalogue—free.

Boeckh's Bridled Brush

CHAS. BOECKH & SONS, Mfrs. - - TORONTO, ONT.



See our line

OF

STERLING SILVER

AND

ELECTRO SILVER PLATE

before placing your Christmas order for same . . .

THE TORONTO SILVER PLATE CO. Limited

E. G. GOODERHAM
Manager and Sec. - Treasurer

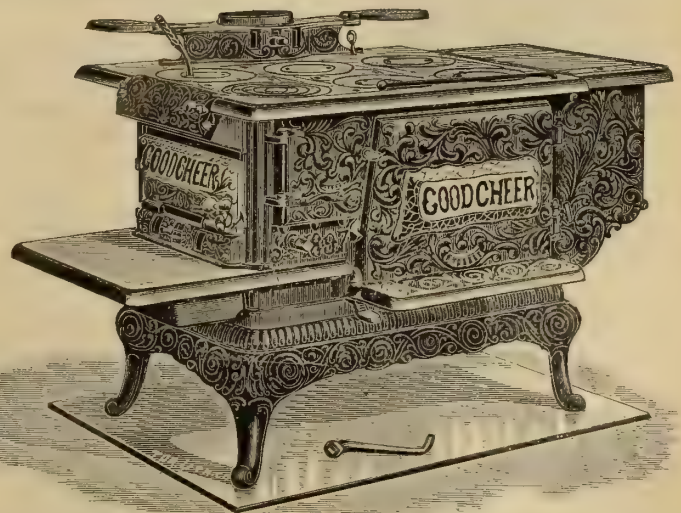
Factories and
Salesrooms:

TORONTO, CAN.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

J. McD. HAINS has been appointed curator of the business of C. W. Henderson, dealer in electrical supplies, Montreal.

Adam & Co. general merchants, Dauphin, Man., have assigned.

Joseph Archibald, saw mill owner, Bedford, N.S., has assigned.

H. C. Pickles, general merchant, New Germany, N.S., has assigned.

Geo. A. Whittaker, general merchant, Oak Point, N.B., has assigned.

A. J. Allaire, general merchant, St. Guillaume D'Upton, Que., has assigned.

A winding up order has been granted in connection with the Beaver File Works, Levis, Que.

Mrs. F. Parent, general merchant, St. Jerome, Que., has assigned to Alexandre Desmarteau.

Marceau & Lemelin, general merchants, Lake Megantic, Que., have compromised at 75c. on the dollar.

T. Anthony's Sons, hardware merchants, Berwick, N.S., are offering to compromise at 50c. on the dollar.

John W. Ross has been appointed curator of the business of R. J. Latimer, dealer in carriages and implements, Montreal.

Wm. Glanville, manufacturer of brick, Palmerston, Ont., has assigned to H. McEwing, Palmerston. A meeting of creditors was held on the 29th ult.

PARTNERSHIPS FORMED AND DISSOLVED.

Blain & Charbonneau, painters, Montreal, have dissolved partnership.

G. & E. Ball, contractors, Montreal, have dissolved. Eli Ball continues, with style unchanged.

Simpson & Young, general merchants, Crystal City, Man., are dissolving. P. A. Young & Co. continue.

SALES MADE AND PENDING.

Stitt & Mills, general merchants, Slocan City, B.C., have sold their stock.

Croil & McCullough, general merchants, Wales, Ont., are about selling out.

The assets of H. Girard, general merchant, Lacolle, Que., have been sold.

The stock of bicycles of Alexander & Lefebvre, Montreal, have been sold.

The general stock of Jules Parent, Beauport, Que., has been sold at 52c. on the dollar.

Jane A. Johnston, general merchant, Newbridge, Ont., is advertising her business for sale.

The property, etc., of the Guelph Norway Iron and Steel Co., Limited, Guelph, Ont., is advertised to be sold by auction 6th inst.

The stock, etc., of the estate of E. N. Hurtubise & Co., general merchants, South

Casselman and Riceville, Que., is advertised to be sold by auction 5th inst.

The assets of Thos. E. Howard & Co., dealers in brass goods, Montreal, are to be sold by tender.

The general stock of the estate of A. G. Lang, Hespeler, Ont., was advertised to be sold by auction 29th inst.

CHANGES.

J. Bail is starting a business in coal in Montreal.

Azaire Nault, Paris, Que., is commencing a general business.

L. O'Dell is commencing a harness business in Minnedosa, Man.

George McDonald, harness dealer, Kingston, Ont., has left the place.

C. S. Cooke, Boissevain, Man., is commencing a general business.

Horn & Trainer, Deloraine, Man., are commencing a general business.

John Walker, blacksmith, Smithville, Ont., has removed to Grimsby.

Fisher & Co., general merchants, Russell, Man., have sold out to — Hill.

Ridley & Cleland are about starting a general business in Wales, Ont.

N. Byers, hardware merchant, McGregor, Man., has sold out to J. H. M. Carson.

Dingwall & Ross, hardware merchants, Port Hope, Ont., are giving up business.

Tolton & McKay, dealers in bicycles, Galt, Ont., are removing to Hamilton.

Carson & Ferguson, blacksmiths, Forest, Ont., have been succeeded by Carson & Co.

Alexander Burnett, blacksmith, Lakelet, Ont., has been succeeded by James Sheara.

Robert Hill, general merchant, Glen Annan, Ont., has sold out to James Fleming.

T. D. Kinsella, harness dealer, Trenton, Ont., has been succeeded by James Halliday.

W. A. Mitchell, of Mitchell & Gibson, marble dealers, Gananoque, Ont., has left the place.

McDonald & McDonald, general merchants, Westville, N.S., have gone out of business.

W. C. Schlueter, general merchant, Preston, Ont., has been succeeded by C. Schlueter.

John J. Campbell, general merchant, Little Glace Bay, N.S., has registered consent for his wife, Mary, to do business in her own name.

E. D. Morris, dealer in builders' supplies, coal and wood, Toronto, has sold out to National Supply Co.

Harper & Lee, dealers in stoves and tinware, Goderich, Ont., are to be succeeded by Lee & Sheppard on the 1st inst.

Guillaume Narcisse Ducharme is registered proprietor of the new hardware business of J. A. Fauteux & Co., Montreal.

The business of Miller Bros., dealers in pianos, sewing machines, etc., Halifax, is to be continued under the management of Joseph B. Spencer.

FIRES.

The saw mill of W. & J. Anderson, Chesley, Ont., has been burned.

T. F. G. Foisy, manufacturer pianos, Montreal, has had his premises damaged to the extent of \$2,000. Fully insured.

DEATHS.

James H. Pullen, painter, St. John, N.B., is dead.

Chas. Gurney, vice-president of the Gurney-Tilden Co., Limited, manufacturers of stoves, Hamilton, is dead.

DEATH OF EDWIN J. MILLER.

Edwin J. Miller, of the well-known firm of Miller Bros., Halifax, died on Sept. 21, at his residence on Brunswick street. Mr. Miller had been ailing only a few days.

The deceased first started in business in Middleton, Annapolis county, in 1868 with his brother. At that time they dealt in sewing machines and from a small beginning built up an extensive business, with branches in several parts of Nova Scotia as well as in New Brunswick and Prince Edward Island. Later they added pianos, organs and all kinds of musical instruments and employed a number of travelers. At the time of his death the deceased was the sole member of the Halifax firm.

The firm of Miller Bros was well known throughout the Maritime Provinces. Mr. Miller was a man of keen business ability, industrious, and enjoyed the confidence of all. He is supposed to be worth about \$75,000. His many friends will be pained to hear of his death.

NOTICED AN IMPROVEMENT.

Mr. Walter H. Cottingham, managing-director Canadian department, at Montreal, of the Sherwin-Williams Co., paint and varnish makers, has just returned from a two weeks' visit to the principal works, at Cleveland. He remarked to **HARDWARE AND METAL** that he found on the other side a great improvement in business, and the most hopeful and enthusiastic feelings for the future. Business in all lines is good, and prosperity and cheerfulness is in the air everywhere.

At their own works all is activity, and in some departments they are unable to keep pace with their orders. So much is this so that they are building extensive additions to their plant in order to increase the output.

He added further that the Canadian department is also busy and making rapid progress. He is disappointed when the weekly sales show less than double last year.

COPP'S WARRIOR HEATER

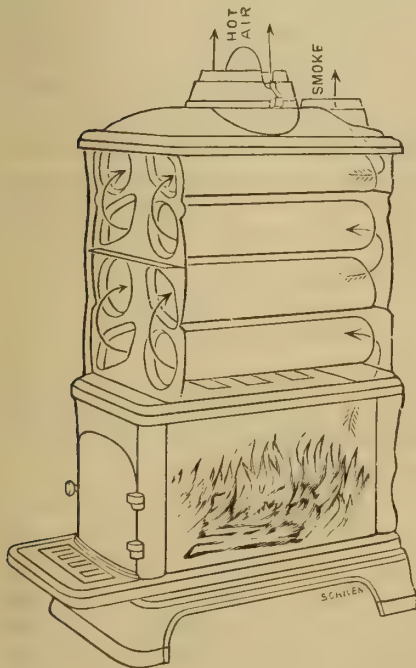


Our Copp Heater is a marvelous success, and has no equal.

It will render a larger increase of trade, as well as greater profit to the dealer, than any other stove made.

Its capacity is from 15 to 20 thousand cubic feet, and obtained with small consumption of fuel.

We shall be pleased to give further information upon enquiry.



This cut shows the manner of conducting the combustion from fire-box to exit, after travelling over 14 feet. Direct draft. Dampers are provided.

The cold air passing in under the centre ring is forced in contact with the peculiarly shaped steel tubes, thereby becoming intensely heated.

One size burning 34 inch wood.

MANUFACTURED BY

THE COPP BROS. CO.

...Limited.

HAMILTON, ONT.

MARITIME BOARD OF TRADE.

THE third annual meeting of the Maritime Board of Trade was held last Tuesday and Wednesday at Charlottetown, P.E.I., with a good attendance. The delegates present were: From Halifax—James Hall, Geo. Mitchell, G. E. Faulkner, Jas. Morrow, and H. L. Chipman. From St. John—C. B. Lockhart, W. M. Jarvis. From Truro—Dr. H. D. Muir, G. A. Hall, R. J. Turner, Wm. Craig and J. E. Bigelow. From New Glasgow—D. McDermid and Harvey Graham. From Kentville—M. G. DeWolf and R. W. Eaton.

A communication was read during the first session from S. Schofield, with suggestions regarding discussion of fire insurance forms, to the effect that standard policy forms be adopted and accompanied by a copy of the resolution of the St. John Board of Trade that their use be ratified by Act of Parliament.

The Standing Committee election resulted in the choice of the following: Jarvis, Morrow, Muir, DeWolf, Graham and Hazard.

At the Wednesday evening session, after an interesting discussion pro and con regarding commercial travelers' tax, G. E. Faulkner moved the following resolution, seconded by Mr. Turner and carried:

Whereas, the policy of free and unhampered commerce between various provinces of the Dominion of Canada is one of the fundamental principles upon which the union of the provinces was consummated; and whereas, the Legislature of P.E.I. has enacted a law placing a tax on commercial travelers and a proposal to enact a similar law has been before the Legislature of one of the other provinces;

Resolved, that the Board of Trade of the Maritime Provinces place itself on record as against legislation of this character and commends to the commercial public of P.E.I. the desirability for having the Act repealed.

A resolution regarding discrimination in coal rates to manufacturers as against Truro and other towns similarly situated and praying the Minister of Railways that it be removed, carried on the motion of G. A. Hall, as a resolution also carried to memorialize the Dominion Government to place another winter boat on the route to maintain the winter communication.

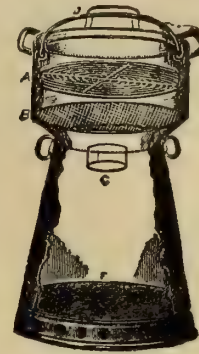
Mr. Jarvis moved the following resolution which carried:

Resolved, that this board desires to impress on the various local boards the importance of doing all in their power to encourage tourist travel in their respective localities.

Also, resolved, that this board submit to the Government the importance of providing a bylaw that each can or package be marked with nett weight of article contained therein and suitable penalties be imposed for infractions in putting up such goods.

Also, resolved, that this board urge the Dominion Government to take over the telegraph service connecting P.E.I. as a Government work or bring about a re-adjustment of the rates.

THE "KRASEL"



Double Ash Sifter

P. R. KRASEL

Patentee and Manufacturer

2529 St. Catherine St.

MONTREAL

Write for prices and samples

Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high

11 inches wide

17 inches deep

2 SIZES WITH OVEN

2 SIZES WITHOUT OVEN

Manufactured by

Burrow, Stewart & Milne
HAMILTON

THE MAN AND THE OPPORTUNITY.

JOE STOKER, rear brakeman on the —accommodation train, was exceedingly popular with all the railroad men. The passengers liked him, too, for he was eager to please and always ready to answer questions. But he did not realize the full responsibility of his position. He "took the world easy," and occasionally tipped; and if anyone remonstrated, he would give one of his brightest smiles, and reply in such a good-natured way that the friend would think he had overestimated the danger: "Thank you. I'm all right. Don't you worry."

One evening there was a heavy snow-storm, and his train was delayed. Joe complained of extra duties because of the storm, and slyly sipped occasional draughts from a flat bottle. Soon he became quite jolly; but the conductor and engineer of the train were both vigilant and anxious.

Between two stations the train came to a quick halt. The engine had blown out its cylinder head, and an express was due in a few minutes upon the same track. The conductor hurried to the rear car, and ordered Joe back with a red light. The brakeman laughed and said: "There's no hurry. Wait till I get my overcoat." The conductor answered gravely, "Don't stop a minute, Joe. The express is due." "All right," said Joe, smilingly. The conductor then hurried forward to the engine.

But the brakeman did not go at once. He stopped to put on his overcoat. Then he took another sip from the flat bottle to keep the cold out. Then he slowly grasped the lantern and, whistling, moved leisurely down the track.

He had not gone ten paces before he heard the puffing of the express. Then he ran for the curve, but it was too late. In a horrible minute the engine of the express had telescoped the standing train, and the shrieks of the mangled passengers mingled with the hissing escape of steam.

Later on, when they asked for Joe, he had disappeared; but the next day he was found in a barn, delirious, swinging an empty lantern in front of an imaginary train, and crying, "Oh, that I had!"

He was taken home, and afterward to an asylum, for this is a true story, and there is no sadder sound in that sad place than the unceasing moan, "Oh, that I had!" "Oh, that I had!" of the unfortunate brakeman, whose criminal indulgence brought disaster to many lives.

"There are moments," says Dean Alford, "which are worth more than years. We cannot help it. There is no proportion between spaces of time in importance nor in value. A stray, unthought-of five minutes

may contain the event of a life. And this all-important moment—who can tell when it will be upon us?"

"What we call a turning-point," says Arnold, "is simply an occasion which sums up and brings to a result previous training. Accidental circumstances are nothing except to men who have been trained to take advantage of them." An opportunity will only make you ridiculous unless you are prepared for it.

The trouble with us is that we are ever looking for a princely chance of acquiring riches, or fame, or worth. We are dazzled by what Emerson calls the "shallow Americanism" of the day. We are expecting mastery without apprenticeship, knowledge without study and riches by credit. Because the politician acquires power by bribing the caucus, influence by "standing in" with the saloon-keeper, wealth by fraud and immunity from conviction by packing the jury, we are cozened into looking at life through a distorted lens. These are opportunities to be shunned like the cholera. They appear to rest upon a solid foundation, but they lead to infamy, and crime, and harmfulness to mankind, and perhaps suicide.

Young men and women, why stand ye here all the day idle? Was the land all occupied before you were born? Has the earth ceased to yield its increase? Are the seats all taken? the positions all filled? the chances all gone? Are the resources of your country fully developed? Are the secrets of nature all mastered? Is there no way in which you can utilize these passing moments to improve yourself or benefit another? Is the competition of modern existence so fierce that you must be content to simply gain an honest living? Have you received the gift of life in this progressive age, wherein all the experience of the past is garnered for your inspiration, merely that you may increase by one the sum total of purely animal existence?—Pushing to the Front.

BRITISH MACHINES AND ENGINES.

Great Britain maintains her export business in steam engines and machinery fairly well despite the sharp competition with America and Germany. The August figures show only a slight falling off, and that is mainly in mining and textile machinery. The value of exports to foreign and colonial markets during the month were as follows:

Steam Engines.....	1896.	1897
Locomotives.....	£ 58,609	£ 58,885
Agricultural.....	44,493	42,340
Other kinds.....	120,609	119,839
Total steam engines.....	£223,711	£221,064
Machinery.....		
Agricultural.....	£ 56,527	£ 58,656
Sewing machines.....	61,735	67,255
Mining.....	76,378	66,911
Textile.....	517,120	455,759
Other kinds.....	326,126	370,633
Total Machinery.....	£1,037,895	£1,019,214

PROFITS OF NICKEL IRON ALLOYS.

Extracts from a report on nickel iron alloys, made by Dr. Wedding and Prof. Rudeloff, are given in an exchange, among which the following data may be of value: The ingots, numbering 39 in all, were calculated to contain from nothing to 100 per cent. of nickel. Actual results gave .05 to 98.39. Test pieces were cut directly from the ingots. As the percentage of nickel went up, the coefficient of expansion on heating went down. This only holds good up to 16 per cent. of nickel, for with nearly pure nickel the facts are the other way. The limit of proportionality, elastic limit, and ultimate strength, reach their maximum with 8 per cent. nickel in the iron. The elongation decreased as the nickel went up, but at 60 per cent. it recovered again. The fracture of alloys with less than 1 per cent. of nickel showed a tendency to blowholes, which, however, disappeared when this limit was overstepped. From 1 to 3 per cent. nickel the fracture was finely lamellar. Above 3 per cent. the ingots began to show a granular crystalline structure, which finally went over into a sharply-defined, needle-formed crystalline texture. Sixty per cent. nickel again formed an exception, having the finely lamellar structure, and with 30 per cent. nickel the ingot centres contained oxidation products. Cold bending tests give poorer results, as the percentage of nickel goes up, and, as could be supposed, the resistance to shearing increases with the nickel up to 30 per cent., and then drops again. A set of tables is finally given, showing the effect of hammering and rolling the various ingots down to rods. This shows that up to 16 per cent. nickel the ingots could be forged fairly well, but rolling was difficult above 5 per cent. M.

WIRE VS. CUT NAILS.

Touching upon the question as to the durability of wire nails, The Iron Age recently received the following letter from a hardware merchant in Pennsylvania:

"There is one thing which has come to my notice within the last year. I don't know whether it is the general experience of the trade. It is the steady increase in the sale of steel cut nails. One year ago we were selling 20 to 1 in favor of the wire nail; now can safely say we are selling as many cut nails as wire. Our customers complain of their rusting off at the head. In several houses here the wire nails have rusted so much that the owners are now renailing with cut nails. I have also noticed of late that some specifications for buildings are for cut nails. Are we to infer from this that the wire nail is on the decline, or is this only an exceptional case?"

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.
HAMILTON, ONT.

McDONALD & ALLEN KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.
Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

STEEL STORAGE FOR GRAIN.

THE all-steel grain elevator, a comparatively new innovation, is likely to receive a push into popularity if two large structures now under way are successful, remarks an exchange. The elevator of the Northern Steamship Company at Buffalo, in which Armour and another Chicago firm are interested, is nearly completed and will be handling grain in a few weeks. A second of about the same capacity, 30,000,000 bushels, is under way by the Canadian Pacific Road at Fort William, its Lake Superior port. These, although far from the first all-steel elevators, are the only large terminal storehouses ever built, and present many new problems in elevator construction. It is not improbable that steel will displace wood as material for the construction of large elevators, and as a big grain storehouse requires from 4,000,000 to 6,000,000 feet of timber, or about one hundredth part as many tons of steel, the substitution will cut quite a figure in these trades.

Small elevators of steel have been experimented with for several years, and a few are scattered through the west. The Canadian Pacific, however, proposes now to make an experiment on a great scale, and is negotiating with the company at Connorsville, Ind., for building 25,000,000 bushels capacity of these warehouses along its lines chiefly in Manitoba. Such an undertaking would indicate that the road is well satisfied as to the feasibility of the steel elevator idea.

The new Buffalo elevator is to be operated by electric power furnished from Niagara Falls, and is expected to break the monopoly of the grain pool that for years has robbed the western farmer and waxed fat on its rake-off.

FREE GOLD IN ROSSLAND.

A story was current on the street Tuesday that free gold had been discovered in the Iron Colt. The rumor proved to be unfounded. Nevertheless, there is far more free gold in this camp than most people realize. Pretty specimens of visible gold are frequently met with in the lower workings of the Le Roi, and all the Centre Star ore is free milling in greater or less degree. One of the most interesting incidents in connection with a visit to the latter mine is to pan out a shovelful of ore from the dump, when a glistening show of colors is almost sure to result. Oliver Durant, the manager of the Centre Star, says that much of his ore could be profitably treated by an amalgamating process, though, of course, this method would not save the values contained in the sulphides.—Miner, Rossland.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

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Tandem Anti-Friction

--- Metal

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MONTREAL.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works
(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

PLUMBERS ARE BUSY.

THE plumbing trade, as a whole, is just now feeling the increased circulation of money and the rise in the price of wheat perhaps more than any other trade. All summer the plumbers and steam-fitters have been kept reasonably busy, and jobs have been 100 per cent. more numerous than they were last year. One dealer, in conversation with PLUMBER AND STEAM-FITTER this week, said that while last summer his firm was just able to exist with help reduced to almost the smallest possible margin, it was kept "up to its ears" in work this season, and was always looking around for more experienced men as well as for boys to learn the trade. "Why, just this week," he said, "we took on three boys and are looking for a fourth."

It seems to be hard, too, to secure strong boys who are willing to learn the trade. Great care has to be taken in the choice, for youth and weakness have to be discarded. It is not every boy who can stand the heavy fall work of tearing down old rusty pipes, of lifting furnaces and stoves, and of carrying a rod of pipe quite a distance to the shop. Many an apprentice will "play out" if taken on. For that reason plumbers are experiencing considerable difficulty in securing help.

Of course, a great deal of the rush now is not entirely due to improved trade. A certain amount of the repairing in heating apparatus is compulsory, but the fall rush of last year was not nearly so heavy as this year's appears to be. Some of the Toronto plumbers already have contracted for as much work as they will be able to do during the rest of this season, and unless they are able to obtain further help, they must needs soon refuse work that will require immediate attention.

The material being supplied this year also continues to be of superior quality, and cheap goods are a drug on the market. In fact, a great part of the demand is caused by a desire for better closets and baths than those with which people are already supplied. The outlook could not be much more favorable seems to be the universal opinion of those in connection with this trade.

PLUMBING APPRENTICESHIP.

The old apprenticeship system is dead both in England and America, but its influence for good or for evil is yet a subject for discussion. It has certainly done its work well, but it seems that the world has outgrown it, for the conditions of society under which it was valuable no longer exist. All forms of slavery, no matter how diminutive they may be, have disappeared and cannot be revived. The responsibility and the liberty of the lad were rendered nil by the fact that he lived in his master's house. He had no privilege to leave whenever he or his parents considered it wise that he should do so. Certainly a lad must remain some time in the one shop; he should not be always changing his position. He must realize that he is educating himself and is gradually securing a competency. He should not consider his wages as of main importance; he is obtaining only a temporary living. However, the apprenticeship system appeared to render the position as one of drudgery to a lad. Now the lad is hired to make himself useful, with the understanding that he is to pick up the trade as part payment for his services, and his success depends on his personal ability and on the sort of shop in which he chances to be employed.

Thus, the only way of making him as successful in his new sphere as he was in his old is to give him more ability, and that is obtained only by an industrial education. Formerly, a lad was not taught to read and write; now, as a general rule, he can do this proficiently. He should also be taught to draw well. It has been suggested that industrial schools be founded through the country. In this way a class of workmen

would gradually grow up who would be far more proficient and efficient than any of their predecessors. This point needs a great deal of emphasis. Good labor is yearly becoming more dependent on general education and less on specialized ability. The fact that it is becoming more necessary to have a good education, as well as a knowledge of the trade, to be a first-class plumber, is gradually coming more into evidence.

PLUMBING CONTRACTS.

Jos. Boussiere & Co., of Montreal, have secured the contract for the plumbing and roofing of a house for G. Bouissere.

J. Foster, of Montreal, has secured the contract of heating and ventilating Knight's Hotel, Coaticook, and another of the plumbing and ventilating of B. Latimer's stables, Montreal.

PLUMBING NOTES.

Louis Julien, plumber, Quebec, is dead.

Carroll Bros., plumbers, Montreal, have had their stock partially damaged by water. Insurance will cover the loss.

The stock, etc., of Wm. W. Watson, plumber, Montreal, was advertised to be sold by auction on the 28th ult.

Building permits have been issued in Toronto to Mrs. Bowbeer for a \$190 addition to her house at 58 Northern avenue, and to Thomas McIlwain, of 174 Arthur street, for four detached two-storey houses on the east side of Kensington avenue, near Baldwin street, to cost \$6,000.

VALUE OF EARLY INDUSTRY.

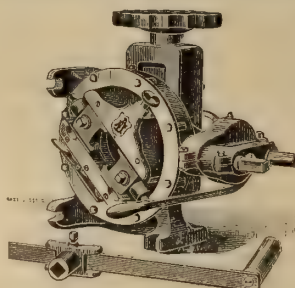
Success in business begets success, and failure begets failure, says an exchange. The young man who has made a

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power.)

Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.



New No. 0 Threading Machine.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

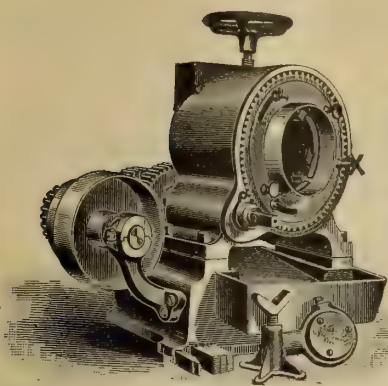
OUR HAND MACHINES are the only portable hand machines in the market with which **one** man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

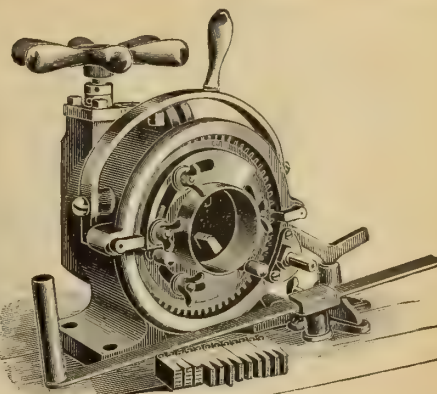
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

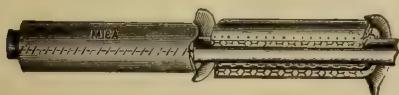
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS



RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS



SMALL
RUBBER
GOODS

MOULDED
RUBBER
GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

BRASS GOODS

... FOR ...

Steam-Fitters, Plumbers, etc.

Made only by the very best makers.

Full line carried in stock. Low prices. Prices quoted on application.

MECHANICS SUPPLY CO., 96 St. Peter St., QUEBEC

few thousand dollars at the age of 25 usually has an easy road to travel and seldom meets with failures afterwards; but those who have met with failures until 30 or 35, usually have failures afterwards. Their difficulties increase in the same proportion as they grow older, while the difficulties of the early successful man grow less and less with the advance of his years. The man in advanced years finds it harder to save than the younger man, and as it becomes more difficult to accumulate money, he is in danger of starting on insufficient capital and he naturally starts in smaller and less remunerative enterprises than his younger

brother who had success early in life and more capital. While he whose career begins late has a struggle to earn the increasing necessities of life, the younger man is more likely to make more than he needs for his living, because he needs less, and naturally accumulates more capital.

WHAT "GOOD WILL" MEANS.

We frequently hear the term "good will" used in describing a benefit or advantage existing as a part of or in connection with a business, says an exchange. It is defined in several cases as the advantage or benefit which is acquired by an establishment beyond the mere value of the capital, stock, funds, or property employed therein, in

consequence of the general public patronage and encouragement which it receives from constant or habitual customers on account of its local position, or common celebrity, or reputation for skill or affluence, or punctuality, from other accidental circumstances or necessities, or even from ancient partialities or prejudices. This is a definition given by Story and followed in several cases. Boiled down, this definition would seem to mean simply that the good will of a business consists in the probability that customers will continue to come to the old place of business. At best it is a sale of a mere chance, which vests in the purchaser nothing but the possibility that a preference which has usually been extended may continue.

CORPORATE MARK



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS

TORONTO, Oct. 1, 1897.

These prices are for such quantities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley. Per box. \$5 00
I.C., usual sizes 6 25
I.X., " 7 50
I.X.X., " 7 50
J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X., " 4 25
I.X.X., " 5 00
I.X.X., " 5 75
D.C., 12 1/2 x 17 3 00
D.X. 3 75
D.X.X. 5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base 3 15
20x28 6 25

Charcoal Plates—Terne.

Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 7 50
I.X., Orion 7 50

Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs }
" 14x60, " } 0 05 1/4 0 06
" 14x65, " }

Tinned Sheets.

72x30 up to 24 gauge. 0 06 0 06
26 " 0 06 1/2 0 07
28 " 0 07 1/4 0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs. 1 55
Refined " 1 80
Horse Shoe " 1 80
Band " 1 75
Hoop " 2 00
Swedish " 4 00
Sleigh Shoe Steel " 2 50
Tire Steel " 2 50
Machinery " 0 10 0 14
Cast Steel, per lb. 0 10 1/2 0 11
Russian Sheet, per lb. 0 10 1/2 0 11
Tank Plates, 1-5 and thicker. 2 00 2 25
Boiler Rivets 4 50 5 00

Boiler Tubes.

1 1/2-inch 0 06 1/2
2 " 0 07 1/2
3 " 0 09 1/2
3 1/2 " 0 11

Steel Boiler Plate.

1/2 inch 2 45
3/4 " 2 35

3/4 inch and thicker 2 25

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 35 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 30
All bright 2 90

Iron Pipe.

Wrought, 1/4 to 3/8 inch, 1 1/2c.; 1/2 inch, 2 1/4c.;
3/4 inch, 2 7/8c.; 1 inch, 3 3/8c.; 1 1/4 inch,
5c.; 1 1/2 inch, 6 4/8c.; 2 inch, 8 1/4c.
Galvanized, 60 per cent.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb. 0 03 1/4
16 gauge 0 03 1/4
18 to 24 gauge 0 03 1/4
26 " 0 04 1/4
28 " 0 04 1/4

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " 4 75
" 5-16 " " 4 00
" 3/8 " " 3 75
" 7-16 " " 3 35
" 1/2 " " 3 25
" 9-16 " " 2 85
" 3/4 " " 2 75
Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards. 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 1/4 0 12
Lake Superior
Bolt or Bar.
Cut lengths, round, 1/2 to 3/4 in.
round and square
1 to 2 inches. 0 18 0 19
NOTE.—Complete lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.

Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)
4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " " 0 15 1/2 0 16 1/2
" 50 lb. and above, " 0 15 0 16
Boiler and T. K. Pitts.
Plain Turned, per lb. 0 21
Spun, per lb. 0 25

Wire.

Pure, in coils—
From 10 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
aets, hard-rolled, 2x4 ft. 0 20

Zinc Spelter.

Foreign, per lb. 0 04 3/4 0 05
Domestic " 0 03 3/4 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/4
Part casks 0 05 1/2

Lead.

Imported Pig, per lb. 0 04
Domestic, per lb. 0 03 1/2
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 1/2
Sheets, 3 to 6 lbs., per sq. ft.,
by roll. 0 04 0 04 1/4

NORE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 2 1/2 p. c. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Soldier.

Bar half-and-half Per lb. Per
Standard 0 11 0 11 1/2
Wire 0 10 1/4 0 11
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
soldier in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb. 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal.

" Beaver " brand \$0 20
" Tandem " A 0 19
" B 0 16
" C 0 10 1/4

White Lead.

Pure, Assoc. guarantee, ground in oil, Per cwt
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 03
Brandram's B. B. Genuine 7 50
" No. 1 6 75
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
" No. 1 6 20

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)
Pure, per gallon. 1 00
Second qualities, per gallon. 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb. 0 05
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J. F. L. S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
" Umber, " 0 10
do. aw 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/4

Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb. 0 07
M Color, per 100 lb. 1 25
Jo Gen. Red Lead, 100 lb 0 04 1/4
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs
25-lb. Irons
-lb. Boxes

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/4
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

Carriage, No. 1 per gal. 1 50
Extra do. 2 50
Body Varnish 4 60
Furniture Varnish 0 65
Extra do. 0 50
Denar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polish ng Varnish 2 50

Linseed Oil.

Raw, per gal. net 0 43
Boiled, per gal. net 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net 0 46
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lots 0 11

Cod Oil.

Cod Oil, per gal. 0 50 0 55

Glue.

(In bbls.)
Common 0 07 1/4 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to
30 per cent off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent.,
Amer.
Central Fire Cartridges, pistol sizes, Dom.,
30 per cent.
Central Fire Cartridges, Sporting and Mil-
itary, Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and"
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin			Blind Rollers.			Cradles, Grain.			HAMMERS.		
Best thick white felt wadding, in ½-lb bags.....	per lb	1 00	Annex, per doz.....	1 25	1 75	Canadian, dis. 25 per cent.			Nail		
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70		Mascott, ".....	1 35	1 85				Maydole's, dis. 5 to 10 per cent. Can., dis. 25 to 27½ per cent.		
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99		Erminie, ".....	1 12	1 20	Dies.			Tack.		
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35		Blind and Bed Staples.			Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			Magnetic, per doz.....	1 10	1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55		sizes, per lb.....	0 7%	0 12	Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			Sledge.		
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20		Bolts.			Door Springs.			Canadian, per lb.....	0 07½	0 08½
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25		Carriage, dis. 70 p.c. off new list			Torrey's Rod, per doz..... (15 p.c.)	2 00		Ball Peen.		
Thin card wads, in boxes of 1,000 each, 8 gauge.....	0 25		Tire, dis. 70 and 5 per cent.			Coil, per doz.....	0 88	1 60	English and Can., per lb.....	0 22	0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M		Stove, dis. 70 per cent.			English per doz.....	2 00	4 00	HANDLES.		
11 and smaller gauge.....	0 60		Elevator, dis. 35 to 40 per cent			Draw Knives.			Axe, per doz., net,	50	2 00
9 and 10 gauges.....	0 70		Machine, dis. 70 p.c.			American, dis. 70 and 10 per cent.			Store door, per doz.....	1 00	1
7 and 8 gauges.....	0 90		Coach Screws, dis. 80 p.c.			Canadian, dis. 25, 50 and 10 per cent.			Chest, per doz. pairs.....	0 40	2 50
5 and 6 gauges.....	1 10		Boring Machines.			Drills.			Chisel.		
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—			Complete, with augers, each..	5 00	7 50	Millar Falls, per doz.....	16 00	51 50	Firmer, per gross.....	3 00	4 50
11 and smaller gauge.....	1 15		Braces.			P. S. & W., dis. 40 per cent.			Socket Firmer, per gross.....	3 25	8 00
9 and 10 gauges.....	1 40		Barber's.....	6 00	7 75	Hand and Breast.			Socket Framing, per gross.....	3 75	5 00
7 and 8 gauges.....	1 65		Barber's Ratchet.....	10 00	11 00	DRILL BIT.			Fork.		
5 and 6 gauges.....	1 90		Farmers.....	2 00	2 75	Morse, dis. 37½ to 40 per cent.			C. & B., dis. 45 per cent. rev. list.		
Anvils.			Millar's Falls.....	15 50	29 00	Standard, dis. 50 and 5 to 55 per cent.			Hoe.		
Per lb.....	0 10	0 12½	Brackets.			ELBOWS.			C. & B., dis. 45 per cent. rev. list.		
Anvil and Vice combined, each.....	4 50		Shelf.			Per doz.....	75	1 70	Saw.		
Wilkinson & Co.'s Anvils..lb.	0 09	0 09½	Japanned Canadian, per doz. pairs.....	0 50	3 40	Stovepipe.			American, per doz.....	1 00	1 25
Wilkinson & Co.'s Vices..lb.	0 09½	0 10	Berlin Bronze Canadian.....	0 85	3 20	FAWCETS.			Plane.		
Augers.			Broilers.			Cork Lined, per doz.....	0 30	0 35	American, per gross.....	3 15	3 75
Gilmour's, discount 65 p.c. off revised list.			Light, dis. 65 to 67½ per cent.			Wine, per doz.....	1 30	3 25	Hammer and Hatchet.		
Hollow Stearn's, per dozen.....	13 00	20 00	Reversible, dis. 65 to 67½ per cent.			Star, ".....	2 80	3 90	Canadian, 45 per cent.		
Adjustable Stearn's, each.....	5 50	6 50	Vegetable, per doz., dis. 37½ per cent.			Fenn's Corkstops, No. 2, per dozen.....	1 70		Cross-Cut Saw.		
Post-hole, Vaughan's, each.....	1 35	1 60	Henis, No. 8, ".....	6 00		Petroleum, per doz.....	4 50	6 50	Canadian, per pair.....	0 15	0 0
Excelsior, Jennings', discount 50 per cent.			Henis, No. 9, ".....	7 00		FILES AND RASPS.			Door, 4 and 5 inch, per pair.....	0 40	
Awls.			Queen City.....	7 50	10 00	Globe File Mfg. Co.'s dis., files and rasps, 30 and 10 to 70 per cent.			Lanes, 50 to 50 and 5 per cent.		
Sewing, per gross.....	0 65	1 59	Butchers' Cleavers.			Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			HANGERS.		
Pegging, ".....	0 65	1 25	From 8 to ch, per doz....	4 23		Black Diamond, 50 and 10 to 60 per cent.			Door, 4 and 5 inch, per pair.....	0 40	
Brad, ".....	0 85	1 60	Butts.			Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.			Lanes, 50 to 50 and 5 per cent.		
" handled, per gross.....	3 60	30	Brass.			Heller's Horse Rasps, 50 per cent.			HATCHETS.		
Saddler's, per gross.....	0 45	1 60	Wrought Brass, dis., 17½ p.c. revised list.			Jowitt's, English list, 25 to 27½ per cent.			Canadian, dis. 40 to 42½ per cent		
Awl Hfts.			Loose Pin, dis. 70 per cent.			American, 60 to 60 and 5 per cent.			HINGES.		
Patent Peg, oss.....	7 25	8 00	Wrought Steel.			Great Western, 60 and 10 per cent.			Blind, Parker's, dis. 60 and 10 to 65 per cent'		
" Sewing, per gross.....	7 25	8 00	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			FLUTING MACHINES.			" Shepard's Noiseless, dis. 60 per cent.		
Awl and Tool Sets.			Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			Each.....	0 60	2 00	Buffalo, dis. 60 to 70 p.c.		
Millar's Falls, per doz.....	2 80	3 30	Berlin Bronzed, dis. 70, 70 and 5 per cent.			FORKS.			Light T and strap, 70 and 10 p.c.		
AXES.			Gen. Bronzed, per pair.....	0 40	0 65	Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.			Heavy, per lb.....	0 03½	0 04½
Splitting Axes.....	5 25	5 50	Can Openers.			FREEZERS			Screw hook and hinge—		
Chopping Axes—			Acme, per gross.....	9 00	10 00	Gem, from \$1.25 to \$7 net.			6 to 12 in., per 100 lbs.....	3 15	
Black Prince.....	7 25	7 50	Sardine Scissors, per doz.....	3 75	4 50	White Mountain, dis. 50 p.c.			14 in. up, per 100 lbs.....	2 35	
Forest Clipper.....	7 25	7 50	Card.			Arctic, dis. 50 p.c.			Per doz. set.		
Lance.....	8 50	9 00	Horse, per do.....	0 60	1 00	FRUIT PRESSES.			Gate, Clark's.....	1 50	2 20
Mann's.....	8 00	8 25	Carpet Stretchers.			Henis', per doz.....	3 25	3 50	" Shepard's, dis. 50 to 60 per cent.		
Maple Leaf.....	9 50	10 00	American, per doz.....	1 00	50	Enterprise, dis. 10 per cent.			Spring.....	1 00	3 50
Hand Made.....	7 50	7 75	Bullards, per doz.....	6 50	....	Shepard's Queen City, dis. 15 per cent.			" Shepard's Samson.....	1 20	
Climax.....	8 00	8 25	Carpet Sweepers.			GLASS.			HOES.		
Phantom.....	8 25	8 50	Bissell, per doz.....	22 50		Window.			Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list		
Axle Grease.			World, ".....	21 75		Box Price.			Planter, per doz.....	4 00	4 50
Per gross.....	6 00	13 00	Daisy, ".....	24 00		HOOKS.			CAST IRON.		
Bath Tubs.			Star.....	15 00		Bird Cage, per doz.....	0 50	1 10	Clothes Line, per doz.....	0 27	0 63
Zinc, discount.....	3 90	4 0	Crown Jewel, per doz.....	25 00		Harness, per doz.....	0 72	0 88	Hat and Coat, per gross.....	1 00	3 00
Copper, discount, 40 and 10 p.c. off revised list			Grand Rapids, ".....	24 00	33 00	Chandelier, per doz.....	0 50	1 00	Wrought Iron.		
Steel clad, 20 per cent. discount off revised list.			Cartridges.			GAUGES.			Wrought Hooks and Staples, Can., dis. 47½ per cent.		
Boxing extra			(See Ammunition.)			Marking, Mortise, Etc.			Wire.		
Bells.			Castors.			Stanley's, dis. 50 to 55 per cent.			Hat and coat, dis. 60 to 60 and 10 p.c.		
Hand.			Bed new list, dis. 55 to 57½ per cent.			Winn's, Nos. 26 to 33, each.....	1 65	2 40	Belt, per 1,000.....	0 60	2 70
Brass, 60 per cent.			Plate, dis. 52½ to 57½ per cent.			GLASS.			crew, bright, Eng., dis. 60 per cent.		
Nickel, 55 per cent.			Cattle Leaders.			Window.			HORSE NAILS.		
Door.			Nos. 31 and 32, per gross.....	8 50	9 50	Box Price.			Canadian, dis. 50 p.c.		
Gon Sargent's.....	5 50	8	Cement.			ICE PICKS.			Canada Horse Nail Co.'s "C" brand f.o.b. Montreal, "C" 50 p.c.		
" Peterboro', discount 50 per cent.			Canadian, Portland.....	2 50		Star.			KETTLES.		
Cow.			English.....	2 50		Per 50 ft.			Brass spun, 7½ p.c. dis. off new list.		
American make, discount 66½ per cent.			Belgium.....	2 35		Per 100 ft.			Copper, per lb.....	0 30	35
Canadian, discount 45 and 50 per cent.			Canadian hydraulic.....	1 10		Per 100 ft.			American, 60 and 10 to 65 and 5 p.c.		
Farm.			Figures are for barrel lots.			GLASS.			KEYS.		
American, each.....	1 25	3 00	Chalk.			Double Diamond.			Lock, Can., dis. 50 p.c.		
House.			Carpenters' Colored, per gross.....	0 45	0 75	Star.			Cabinet, trunk, and padlock,		
American, per lb.....	0 35	0 40	White lump, per cwt.....	0 60	0 65	Per 50 ft.			Am. per gross.....	1 60	
Bellows.			Red.....	0 05	0 06	Per 100 ft.			KNOBES.		
Hand, per doz.....	3 35	4 75	Crayon, per gross.....	0 14	0 18	Per 100 ft.			Door, japanned and N.P., pe doz.....	0 65	3 00
Moulders', per doz.....	7 50	10 00	Chisels.			Per 100 ft.			Bronze, Berlin, per doz.....	2 75	3 25
Blacksmiths', discount 60 per cent.			Socket, Framing and Firmer.			Per 100 ft.			Bronze Gem, ".....	6 00	9 00
Belting.			American, dis. 75 to 77½ per cent.			Per 100 ft.			Sava, ".....	8 75	10 00
No. 1, leather, discount 60 per cent.			Canadian, dis. 50 and 10 per cent.			Per 100 ft.			Shutler, porcelain, F. & L. screw, per gross.....	1 30	4 00
Standard, 55 per cent.			Tanged firmer, per doz.....	0 85	4 00	GLUE POTS.			GRINDSTONE FIXTURES		
Agricultural, 65 and 5 p.c.			Churns.			Tinned, each.....	0 30		P. S. & W., per doz.....	3 60	4 00
Bench Stops.			Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.			Enamelled each.....	0 55		GLUE POTS.		
Per doz.....	5 00	6 00	Steel, net.....	3 00		GLASS.			GLUE POTS.		
Bits.			Clamps.			Window.			GLUE POTS.		
Auger.			Judds', dis. 20 per cent.			Box Price.			GLUE POTS.		
Gilmour's, discount 65 and 5 per cent.			Stearns', per doz.....	3 00	10 00	GLASS.			GLUE POTS.		
Excelsior, discount 60 per cent.			Clips.			Window.			GLUE POTS.		
Rockford Common, 65 to 65 and 5 per cent.			Axle dis. 65 per cent.			Box Price.			GLUE POTS.		
" Perfection, 50 and 10 per cent.			Coffee Mills.			Double Diamond.			GLUE POTS.		
Jennings' Gen., net list to 5 p.c. discount.			Box.....	3 60	13 00	Star.			GLUE POTS.		
Car.			Side.....	3 60	4 00	Per 50 ft.			GLUE POTS.		
Gilmour's, 47½ to 50 per cent.			Enterprise, No. 0.....	1 35		Per 100 ft.			GLUE POTS.		
Expansive.			No. 2.....	70		Per 100 ft.			GLUE POTS.		
Clark's, per cent.			Compasses, Dividers, Etc.			Per 100 ft.			GLUE POTS.		
Excelsior, 10 per cent.			American, dis. 62½ to 65 per cent			Per 100 ft.			GLUE POTS.		
Gimlet.			Compasses, Dividers, Etc.			Per 100 ft.			GLUE POTS.		
Clark's, per doz.....	0 65	0 90	Compasses, Dividers, Etc.			Per 100 ft.			GLUE POTS.		
Diamond, Shell, per doz.....	1 00	1 50	Compasses, Dividers, Etc.			Per 100 ft.			GLUE POTS.		
Nail and Spike per gross.....	2 25	5 20	Compasses, Dividers, Etc.			Per 100 ft.			GLUE POTS.		



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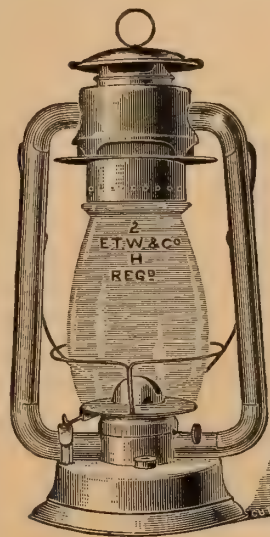
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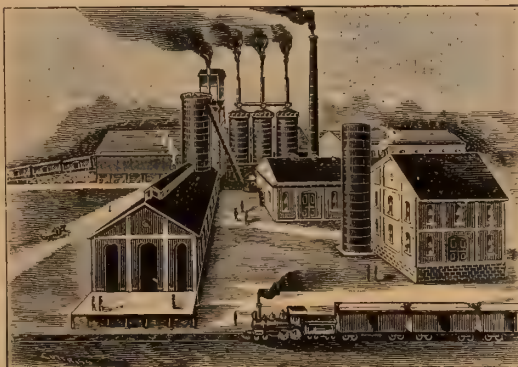
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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, OCTOBER 9, 1897

No. 41



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Best Anti-Friction Metal for all Machinery Bearings

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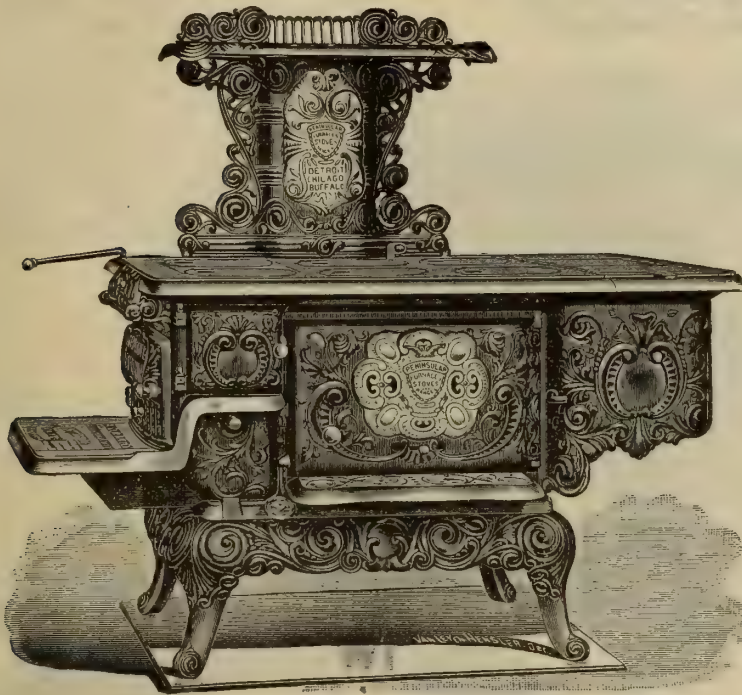


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From Monday the 11th to the 30th of October this stock will be offered without reserve.

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A visit to the warehouse will be to the buyer's interest. The stock consists of **General Hardware, Sporting Goods, Glass, Paints, Oils, Varnishes, Silverware, etc.**, all of which will be cleared out. **This will be the most important clearing sale ever held in the Province**, as the stock is new and well assorted. Orders filled as received and accepted subject to stock not being sold. Yours truly,

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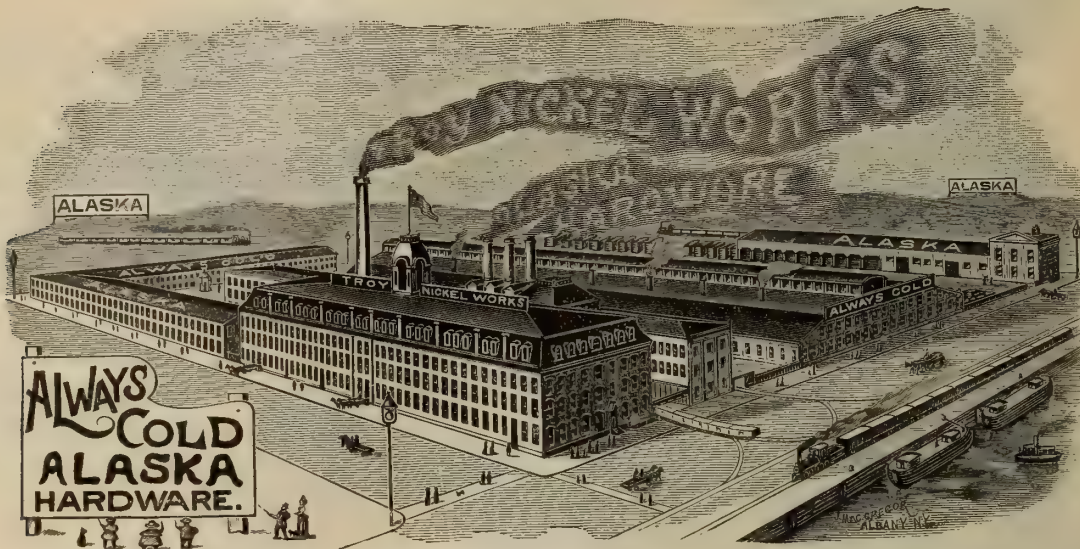
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Pokers, Shovels
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OUR

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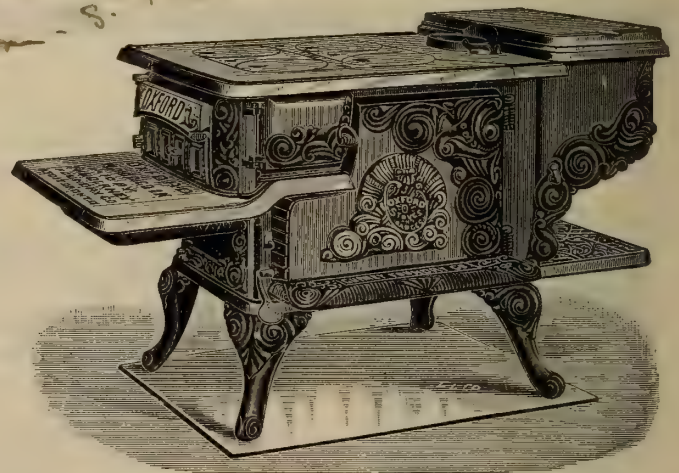
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FURTHER ADVANCES IN RAW MATERIAL.

THE improvement and buoyancy displayed by all kinds of heavy iron and metals continue, and further notable advances have been recorded in raw and finished material that are certain to influence values on staple lines of hardware sooner or later.

All the large manufacturing establishments in the States report their order-books well filled, in many instances up to the end of this year, and advances have been made all along the line during the past eight days of from \$1 to \$4 per ton on finished material. In the case of wire rods, for instance, Canadian manufacturers who were compelled to go into the market for supplies recently, were asked the remarkable advance of \$6 per ton.

With this appreciation in the cost of their raw material, the present unsettled condition of values and low range both on plain wire and wire nails cannot last much longer. In fact, many in the trade look for a rise in the price of both very shortly.

All other raw material is equally strong. One Montreal mill that tried to buy a certain description of scrap was asked an ad-

vance of over \$4 per ton. It had got its last supplies at \$15, but now has to pay \$19.25 per ton.

Another buyer had under negotiation a line of 200 tons or so of steel billets. He got an offer on them, but neglected to close the deal for two or three days. When he finally did so his order was refused, except at an advance of \$2.50 per ton; and now \$21 is being asked for steel billets laid down in Montreal.

These are good illustrations of the general firmness of iron, which is not by any means confined to the lines mentioned, but extends to all.

IRON PIPE HIGHER.

THERE has been a further advance in makers' prices* for Canadian iron pipe, both black and galvanized, aggregating about 7½ per cent.

In consequence of this the market has a very strong tone, the demand being good, while it is impossible to obtain prompt deliveries. In fact, jobbers have been unable to accumulate any stock between the intervals of the recent advances, and have no difficulty now in getting full rates.

The new compared with the old jobbing scale is as follows:

	New List. Per 100 ft.	Old List. Per 100 ft.
Black Pipe.		
¼ inch.....	\$2 05	\$1 90
¾ ".....	2 05	1 90
½ ".....	2 45	2 35
¾ ".....	2 90	2 84
1 ".....	4 20	3 91
1¼ ".....	5 35	5 25
1½ ".....	6 90	6 66
2 ".....	9 35	8 97
2½ ".....	13 60	....
Galvanized.		
¼ ".....	4 25	4 15
¾ ".....	5 25	5 00
1 ".....	7 25	7 00
1¼ ".....	10 00	9 70
1½ ".....	14 00	13 00
2 ".....	19 00	17 25

BRITISH GOODS UNDER THE PREFERENTIAL TARIFF.

THE result of the first four months' operation of the Canadian minimum tariff has not been altogether satisfactory, from a British point of view at any rate.

According to the figures compiled in Great Britain the aggregate exports from that country to Canada for the months of May, June, July and August were £1,044,170, against £1,215,735 for the same period of 1896, a decrease of 14 per cent.

Cotton piece goods decreased £9,000; jute, £10,000; linen, £7,000; woolen fabrics, £22,000; carpets, £5,000; pig iron, £9,000; bar iron, £5,000; railroad iron, £90,000; galvanized sheets, £8,000; tin plates, £67,000; cast and wrought iron, £10,000; steel, £16,000; haberdashery, £10,000; oil seed, £9,000.

Naturally, with a tariff giving British goods a preference of one-eighth on the regular duty, an increase rather than a decrease was to be looked for. And because it was the unexpected and not the expected which happened, it was also natural there should be disappointment in the Motherland.

For the explanation of it British journals have been diligently searching, but not even to their own selves has this searching proved satisfactory.

Although the imports of the Dominion from all countries during the four months in question show a slight decrease in value—only about one and one-half per cent.—it is obvious the cause of the decreased imports of British goods is not therein to be found. But, then, while the total imports

of the Dominion for the four months fell off, the opposite was the case in some of the lines in which the exports to this country from Great Britain showed such a marked falling off.

It is obvious, then, that in those lines which we bought more largely of and the exports of which to this country from Great Britain exhibit a decrease, that we must have transferred a part of our patronage from the Motherland to some other country or countries.

The following table gives the chief imports of dutiable goods into Canada during May, June, July and August, in which there were increases, together with a comparison of the same months last year :

Iron and steel and manufactures of—

	1896.	1897.
May.....	\$796,551	\$ 906,014
June.....	784,772	1,086,410
July.....	706,979	1,025,957
August.....	651,222	1,098,408
	\$2,939,524	\$4,116,799

Lead and manufactures of—

May.....	\$38,083	\$28,958
June.....	15,694	30,783
July.....	12,447	28,833
August.....	16,543	21,449
	\$82,767	\$110,023

Metals and manufactures of—

May.....	\$23,934	\$33,222
June.....	28,519	29,221
July.....	26,073	25,154
August.....	20,811	40,825
	\$93,337	\$128,422

Hats and caps, etc.—

May.....	\$ 60,144	\$ 66,015
June.....	32,640	42,918
July.....	45,291	60,519
August.....	139,577	151,458
	\$277,658	\$320,910

Silk and manufactures of—

May.....	\$ 68,340	\$122,290
June.....	116,519	89,933
July.....	188,439	193,857
August.....	275,911	266,333
	\$649,209	\$672,413

Cottons, clothing, thread, etc.—

May.....	\$115,211	\$125,088
June.....	105,520	121,364
July.....	129,343	157,130
August.....	143,713	144,234
	\$493,787	\$547,816

The above figures show an increase of about 40 per cent. in iron and steel, nearly 33 per cent. in lead, 37.50 per cent. in metals, 15.50 per cent. in hats, caps, etc., nearly 40 per cent. in silks, nearly 11 per cent. in cottons clothing, thread, etc. Although no detailed statement of The Trade and Navigation Returns is yet procurable in order to obtain access to details, there is no question but that these increases have been obtained at the cost of British to the advantage largely of United States products.

The fact, however, must not be overlooked that Canada is gradually increasing the proportion of goods which she supplies the home market.

Four months is, of course, a period too short to put an instrument like the minimum tariff on its trial. But this fact is evident : A difference of one-eighth in the duty is not enough to affect the importation of British goods in competition with those from the United States.

Proximity to the Canadian market more than counterbalances the advantage of one-eighth difference in the duty, while it must be remembered that manufacturers in the United States have, within the last few months, showed increased aggressiveness in their desire to capture the Canadian market.

The one-eighth reduction has not hindered the importation of British goods into Canada, but it certainly has not yet appreciably helped it. After August 1 next, when the the one-fourth reduction goes into operation, it is to be hoped that the result will be more favorable to British goods.

Great Britain puts no barrier in the way of the importation thereto of Canadian goods. The United States, on the other hand, studies to have no dealings with Canadians except of the jug-handled kind : They want to sell to us, but they do not want to buy from us.

As long as the United States refuses to give the quid pro quo it is obviously the duty of Canadians to give the products of Great Britain all the preference in this market they can afford to give.

At the moment, Canada no doubt appears to Great Britain in much the same light as a customer who had professed to a merchant to have made arrangements whereby he would increase his purchases from him, but the results had shown that either the arrangements were inadequate or that the customer was insincere. We must show the business men of the United Kingdom not only that we are sincere but that we mean business.

It is not altogether the length of time a young man serves at a certain occupation that determines his knowledge of the same. Application is a factor without which length of service does not count for much.

SITUATION IN WIRE NAILS.

AN advance in wire nails has been decided upon by the manufacturers in Montreal.

The base figure is now \$1.75 f.o.b., or equal to \$1.90 Toronto. Until this advance, they were quoting as low as \$1.77 for points as far north as Orillia.

In Toronto and the west there is a firmer feeling on account of the action of the makers in Montreal, but up to the time of going to press no actual advance in price has taken place.

As pointed out last week, the present price of wire nails is several cents below the laid-down cost of the Pittsburg product, and this fact, together with the firm condition of the market for raw material, is favorable to an advance ; but the trouble is the manufacturers are afraid of each other.

How long this fear will prevent what they all agree is warranted, namely, an advance in price, remains to be seen. One thing is certain, there will be an advance if the manufacturers in Toronto and the west can agree upon it.

CHARCOAL TIN PLATE SCARCE.

There is a decided scarcity of charcoal tin plate, especially 20 x 28, in Montreal this fall, and stocks generally are light. In fact, some observers of the market look for short supplies this season.

They assume this because makers on the other side are full of work, and lots of orders for fall shipment placed lately by importers will be shut out. That is, they cannot be executed in time to catch the last steamer to Montreal previous to the close of navigation.

In coke tin plate the case is different, as stocks of these are comparatively well assorted.

JUMP IN STEEL SNOW SHOVELS.

The manufacturers in Canada of steel snow shovels have taken the jobbing and retail trade by surprise, having advanced the price of their product 40c. per dozen over last season's figures.

As some of the jobbers have already booked large quantities of orders for delivery later on at old prices, they feel somewhat disconcerted, as it will mean a heavy loss to them unless the manufacturers come to their rescue.

LEAD AND ZINC PRODUCTION IN THE STATES.

IN spite of the fact that the year 1896 was one of general industrial depression, reflected in the case of lead by a sharp contraction of the consumption, the output of the metal in the United States showed so marked an increase that the record of 1891 was passed. In that year the quantity of lead produced from ores mined in the United States was 178,554 short tons. In 1896 it reached over 188,000 short tons. Even that quantity did not cover the requirements of the country, in a year of depression, by 20,000 short tons.

The production may be divided into two groups, that of desilverized lead obtained from smelting argentiferous ores drawn from the Rocky Mountain region and that of "soft" lead, produced from non-argentiferous ores of the Mississippi Valley. In 1886 the treatment of foreign ores in the United States smelting works began to assume importance, and it became necessary to make allowance for the quantities involved in order to arrive at the actual lead production. Later the refining in bond of

foreign base bullion became an important industry. Varying quantities of the metal so produced are retained for home consumption, so that it became necessary to make special enquiries dealing with this feature. These have been some of the things that have rendered complications in regard to the obtaining of exact information numerous. The system now adopted is that of appealing to the smelters for a statement showing a source territorially of the lead contents of the ore worked by them.

The zinc industry, in common with the leading manufacturing industries of the country, suffered from the financial crisis of 1896. The principal channels of consumption, including brass manufactories, galvanizing iron branches, and the building industries, were all contracted. There was, therefore, a sharp decline from the record production of 1895. In 1895, 89,686 short tons of zinc were produced, while in 1896 the production totalled to only 81,499 tons. During the first half of 1897 the production was at the maximum rate yet attained, so that a speedy recovering from last year's depression is anticipated.

THE PRICE OF SHEET ZINC.

The present price at which wholesalers are selling sheet zinc is, it is contended by some of them, lower than the condition of the market warrants.

Those who hold this view contend that wholesalers should at least get a profit of 10 per cent. That they are not, taking the present market price as the basis, is evident.

The ruling wholesale price in Toronto today is 5 1/4 c. per pound, and the price which importers have paid lately for carload lots, laid down, is 5 c. per pound. It is, therefore, evident that instead of earning a 10 per cent. profit their margin is only one-half that amount.

NO DELIVERY OF HORSESHOES.

Hereafter there is to be no delivery of horseshoes, the manufacturers having decided to discontinue Toronto, Hamilton and London as delivery points.

The price f.o.b. Montreal is \$3.35, which is as before, but the decision to no longer sell delivered will, jobbers in Toronto claim, compel them to eventually advance their figures.

The Only Way

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



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ALUMINUM: A NEWCOMER AMONG THE METALS.

THE recent announcement that contracts had been signed for the delivery in England of one thousand tons of crude aluminum of American manufacture recalled attention to the fact that this metal is now produced in the United States in large and increasing quantities. A few years ago the manufacture of aluminum on a commercial scale was regarded as almost beyond the range of possibility. Those who predicted it were considered dreamers, and capital shunned investment in such an enterprise.

Steadily, and so quietly that most of us have hardly been conscious of the fact, a new "white metal" has won its way to a place in the industrial world which, if not that to which the early enthusiasts had assigned it in their dreams, may yet be fairly called a firm foothold. To all intents and purposes the history of aluminum begins with the invention of the processes which made possible its use in the arts on a large scale. In the United States this has been accomplished since 1886, and all that was done in Europe prior to that date by way of popularizing the knowledge and use of the metal is rendered insignificant by comparison with the results since achieved. It requires no long memory, therefore, to recall the time when aluminum had no history at all. The closing years of the century are witnessing a remarkable development in the manufacture and consumption for industrial purposes of this wonderful new metal. Indeed, it has been possible for a single generation to see the birth and the successful growth of the entire aluminum industry. In the United States alone in the year 1896 the amount of crude aluminum produced exceeded one million three hundred thousand pounds—one-third of the world's total output. All of this large product was manufactured by a process of American invention perfected by American brain, energy, and capital. It is because of this rapid growth in our own country of an industry which bids fair to attain still greater importance as the years go by that some account of its origin seems now in order.

A PROBLEM FOR INVENTORS.

Twelve years ago the world's chemists and physicists were looking for some cheap way of producing aluminum—"the metal of the future." The properties of this element were well understood. It was known to be hard, malleable, ductile and very light. The uses to which it might be put had long been the subject of curious speculation. It was dreamed of as the coming rival of steel, copper and tin. Engineers were eager to test its merits as a substitute for heavier metals in various important con-

structions. One thing only kept it from being more thoroughly studied and more generally adopted in the arts—its enormous costliness. The difficulties in its production were so great that unless they could be materially reduced the most sanguine admirers of this metal could not hope to see it compete successfully with any of the metals in general use; for many years aluminum was classed with silver as regarded cost of production.

It was at this time, when metallurgists everywhere were seeking a solution of this puzzling problem, that results of the utmost practical importance were reached almost simultaneously by two investigators, each working independently and without knowledge of the other's methods, one in Europe and the other in America.

In 1885 Charles Martin Hall was graduated from Oberlin College, and in that year also he reached his majority. What proved to be of far more consequence, however, to the world at large was the fact that in the same year Hall began to turn his attention in a practical way to the problem of obtaining pure aluminum by cheaper methods than were then known. There had been little in his environment, it would seem, to stimulate the inventive faculty in this particular direction. The son of a Congregational clergyman who had his home in Oberlin, Hall had enjoyed good advantages for a general education, but none in the way of a technical training such as the students at the great engineering and scientific schools possess. The college curriculum in Hall's time offered few electives in chemistry or physics, but the work was fairly thorough as far as it went. The meagreness of the facilities which the college afforded for independent investigation seemed to form no bar to the prosecution of the young student's researches. When apparatus was lacking, makeshifts were constructed, often at the expense of much time and labor, but with marked ingenuity. On the whole, the college did not do a great deal in those days by way of providing equipment for such work as Hall undertook to do; a less persistent spirit might have been deterred by the very paucity of resources; but after graduation, while Hall was working at his problem, he was glad to avail himself of such aid as his alma mater could give, and some pieces of apparatus in the college laboratory were employed in certain experiments which have become historic. It was to his college instructors in chemistry and physics that Hall early confided the first positive results of his work, and their recognition of the value of his achievement was both prompt and appreciative.

EARLY DIFFICULTIES.

But Hall's bent in the direction of scientific research was original, not acquired, and his surroundings while a student at college were not such as would naturally have tended to strengthen that bent. In after years his classmates remembered that he was a good all-round student, quite as much at home in philosophy or the languages as in the sciences or mathematics. He read much outside the required work of the class-room, and was especially conversant with the evolutionary philosophy of Huxley, Darwin, Maudsley and others. He was also a good classical scholar, and read the Greek texts of the course leading to the degree of A.B. with appreciation and fidelity. All these things, however, were side issues in Hall's student life. He was no plodder; study was for him a light and passably agreeable task, and he never seemed to take it seriously. In his senior year especially, although he devoted part of his time to a Geek elective and did creditably all the class work assigned him, he was constantly laying plans for what seemed to him a far more serious business. With only the most meagre equipment, without financial resources, and with little encouragement from friends or associates, Hall now entered on a series of experiments which in less than a year resulted in the discovery of what proved to be a cheap, practicable and efficient process for the extraction of aluminum. Hall has himself said that his first work in this direction did not have reference to electrolysis as the solvent. At intervals during his college course he had experimented in various crude attempts to produce the metal by methods which his reading on the subject had suggested. He had familiarized himself with all that had been written about aluminum, and understood thoroughly the problem of its production.

In 1884 he spent several weeks in an attempt to reduce the oxide of aluminum by carbon at a high temperature with the aid of other reagents. Although in these experiments he used a blast furnace capable of fusing platinum, he failed to accomplish the object in view, and it was then that he turned to electrolysis as the only practicable method. It was natural that at first he should wish to make trial of the process then known of producing aluminum by the electrolysis of the double chloride. He says that he determined to follow out this process carefully, and if possible to improve it. Whether or not he would have succeeded in his efforts to perfect this process must remain a matter of mere speculation. In October, 1885, four months after his graduation from college, he evolved an entirely new plan of procedure. Instead of

applying electricity directly to the chloride—a method which had already been tried and found wanting—he would endeavor to find a stable solvent for alumina itself (the oxide) and would then electrolyze the pure aluminum from the solution. It was, of course, desirable that the metal should be dissolved at a reasonably low temperature and that the solvent itself should be practically unaffected, so that the oxide might be added continuously as fast as it was decomposed by the current. Hall believed that he would find such a solvent in the fluoride of calcium (flourspar), and he experimented with that substance; later he tried the fluorides of magnesium, sodium and potassium. He found that all these compounds were extremely difficult to fuse, and that they did not, when fused, dissolve the alumina appreciably. These facts he might have inferred, perhaps, from the descriptions of these minerals given in the books, but nothing short of actual experiments and observation would satisfy him, and he took nothing for granted. In his search for a solvent he finally determined to test the double fluoride of aluminum and sodium (cryolite). Deville, who had experimented with this mineral 30 years before, had apparently never discovered that it was a solvent, when fused, of alumina. If it could be proven to be such a solvent, the most difficult part of the quest seemed in a fair way to be solved.

Hall's first experiments with cryolite were not altogether satisfactory to him, but he attributed each failure to defects in his apparatus. He fused some cryolite in a clay crucible, dissolved alumina in this bath, and passed an electric current through the solution. On the carbon rod which served as the negative electrode a substance was deposited which had the appearance of aluminum, but it was not the pure metal. A portion of the clay from which the crucible was made seemed to yield its silica to the bath, and thus the product was rendered impure. The only way to obviate this was to employ an insoluble lining for the crucible. The first experiment with a carbon-lined crucible was successful. By the aid of a seven-cell Grove battery, within two hours' time, a reasonable amount of aluminum of a high degree of purity was obtained.

RESULTS LONG DELAYED.

It was on February 23, 1886, that this first successful trial of the process, on the smallest imaginable scale and with the crudest of accessories, was made at Hall's home in Oberlin. A period of two years and a half elapsed before the commercial value of the discovery was fully demonstrated to others, but after that first experiment Hall himself seems to have been as

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Mr. A. P. Carr, a painter of Richfield, Ohio, wrote voluntarily our Cleveland house on 25th Sept. last, as follows:

"Your paint has been used in Richfield to my certain knowledge for fifteen years. I have used **S.-W. P.** for the last 12 years; we have buildings painted in our town which have been painted from seven to nine years with your paint, and other buildings which stand near the same which have been painted twice during that time, with Strictly Pure White Lead and Strictly Pure Linseed Oil. The buildings painted with **S.-W. P.** are in far better condition to-day than those painted with Strictly Pure White Lead and Linseed Oil."

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completely convinced of it as at any subsequent time. On the day after the experiment he wrote to his brother: "If ever an electrolytic process was invented that was feasible, this is. The salt melts at a slow red heat. I use the gasoline stove. It is very easily managed, does not fume, or volatilize, or decompose from air or moisture (altogether unlike the double chloride). By it the metal can be made purer than by any other process. Alumina, the oxide, is very easily made pure. The chloride always contains iron and silicon. Then, too, the oxide is the cheapest compound." Perhaps it should be explained, in this connection, that while aluminum as an element is exceedingly abundant in nature, the oxide is obtained chiefly from the mineral bauxite, of which large deposits occur both in the United States (especially in the south) and in Europe.

At that time (1886) aluminum was quoted in New York at one dollar an ounce. Hall knew that he had found a way by which it could be produced in large quantities and sold at a price which would at once double or quadruple its consumption and extend its use to scores of purposes from which its costliness then debarred it. But without capital he could not put his process in opera-

tion. He could not even demonstrate its feasibility. Assistance from a brother in New England enabled him to go to Boston in the summer of 1886 and begin operations on a small scale with a view to influencing capitalists. He had the use of a dynamo of two or three horse-power, and by employing melting pots lined with carbon he succeeded in making considerable quantities of aluminum, but he failed to convince anybody of the value of his invention, and in October he returned to Oberlin, rigged up a large battery, and proceeded to make aluminum in still greater quantities. He had now worked out the details of the process so thoroughly that he thought he could manufacture the metal on a commercial scale if the necessary apparatus were provided. A company in Cleveland had been engaged for some time in the manufacture of aluminum bronze, but had never made the pure metal and could not make it by any process then employed by them. Hall entered into an arrangement with this company by which the latter granted him the use of facilities for developing his invention, with a view to the ultimate adoption of the process by the company if he should succeed in producing pure aluminum at a reasonably low cost. In the

experiments which he now undertook for the benefit of this company he was not uniformly successful, though in the course of a few months he produced quite a quantity of aluminum of fair quality. He encountered difficulties which, with the apparatus at his command, he was unable wholly to overcome, and after a year of experimentation the company remained unconvinced as to the cheapness of his process. In the meantime he had secured United States patents on the invention, and the question of priority raised by the application of Heroult, who had discovered in France a process almost identical with Hall's, had been decided by the Patent Office in Hall's favor. His contract with the Cleveland company having expired, Hall now endeavored to interest other capitalists. In the summer of 1888 he went to Pittsburg, and there gained the attention of a group of experienced metallurgists, headed by Mr. Alfred E. Hunt. These men were so enthusiastic over the invention and so thoroughly satisfied of its practical value that they at once subscribed the sum of \$20,000 to put it in operation, and before January 1, 1889, the manufacture of aluminum on a commercial scale was an established fact. The American market for pure aluminum has ever since that time been controlled by the Pittsburg manufacturers.

SUCCESS AT LAST.

If we have dwelt unduly on the story of this long struggle to secure a foothold for a new and profitable industry, the remarkable success of the last few years will show all the brighter by contrast. Previous to the opening of the Pittsburg works practically no pure metal was made in the United States. The market price of what was imported had not been lower than \$5 a pound in New York. The American manufacturers were soon able to place the pure metal on the market at 50c. a pound, and an important reduction from this price has lately been made. Besides the original works near Pittsburg, which have been operated continuously since November, 1888, two plants at Niagara Falls are now operated by the same company, and the total productive capacity of the three plants is more than 10,000 pounds of aluminum a day. This output nearly equals the combined daily capacity of all the aluminum works of Europe together.

The Pittsburg Reduction Company, the corporation which owns and operates the American works, has made no deviation from the essential features of the original Hall process. The oxide, which is obtained from bauxite quarried by the company in Georgia, is fused with cryolite in pots of boiler-iron lined with carbon. An electric current is passed through these long series of pots, and the result is precisely similar to what it

was when Hall first sent the seven-cell Grove battery current through his two-inch crucible in Oberlin—the melted aluminum collects on the carbon negative electrode, and, as already stated, the quantity thus collected daily is measured in tons. Continually, night and day, without cessation, this operation proceeds. The raw material is fed in as required; the product is removed and the carbon renewed. The waste of the process is said to be so slight as hardly to be an element of calculation. Then comes the casting into ingots and bars, the rolling into sheets, and the drawing into rods and wire.

ELECTRICITY'S TRIUMPH AT NIAGARA.

Along with the building up of the aluminum industry have come the wonderful developments of the past few years in electric-power transmission. The coincidence has been most fortunate. The first use made of the tremendous electrical energy supplied by Niagara's newly harnessed power, in the summer of 1895, was in the electrolysis of aluminum which we have just described. By far the greater portion of the Pittsburg Reduction Company's product is now made at the Niagara plants, and the recent great extension of manufacturing facilities there has already been the means of bringing about a reduction in the price of the metal of nearly 50 per cent. To the electrical engineer the arrangements at the Niagara works for the transforming and application of the current afford material for a fascinating study; but a detailed description of these arrangements would be impossible in the limits of this article. Besides, these improvements are useful adjuncts rather than essential conditions of success in aluminum manufacture. It is sufficient for the purposes of this article to state that the Niagara apparatus is proving entirely adequate to its work, and that the expectations of the managers have been fully met.

THE USES OF ALUMINUM.

In reply to the query of practical men as to the uses of this new metal, the manufacturers say that it is adapted to a thousand purposes for which strength and durability, combined with extreme lightness, are essential requirements. It serves, for example, as a sheathing of vessels. It will be remembered that on the American racing yacht Defender aluminum plates 12 feet long, 5-16 inch thick, and from 22 to 30 inches in width were used above the water-line; these plates had a very slight alloy of copper. The serviceability of aluminum in salt water has not been fully tested. Owing to the action of alkalis on the pure metal, an alloy is required. Aluminum is also well fitted to serve as roofing material. Bulk for bulk, it is already as cheap as copper and cheaper than nickel or tin. It lends itself

readily to the various processes of stamping or spinning. The greater part of last year's output was sold in sheet form. Aluminum has entered to a considerable extent into the manufacture of bicycles, having been successfully used for almost every part of the bicycle in which metal is employed at all. One company casts the entire frame of the machine of an aluminum alloy, and it is said that the strength of the frame thus made is only surpassed by that of the highest grade of nickel-steel frames. The various parts and fittings of bicycles are made from aluminum by several manufacturers, and many tons of the metal have been consumed in bicycle factories.

Probably the most important use to which aluminum will be put, at least in the immediate future, will be for culinary and household utensils. Besides being very light, and hence far less cumbersome than any other metal of equal strength and durability now used in cookery, aluminum is practically incorrodible. Professor Jamieson asserts that no food now known to man can affect this metal in the slightest degree. It is wholly free from every form of poison and it will not taint food. These are qualities that are possessed by neither iron, copper, tin, nor lead. Furthermore, it is a better conductor of heat than either of the other metals.

The innocuous nature of the metal is an earnest of its future usefulness in surgery. It is already substituted for silver as the material of which tubes are made to be inserted in the windpipes of patients on whom the operation of tracheotomy has been performed. For dental plates also, aluminum is particularly well adapted.

Ten years ago, as we have seen, no pure aluminum was produced in the United States, and in Europe it was produced only at a cost which virtually prohibited its use in the arts. To-day it is the rival of copper and steel in scores of manufactures, and in a single day more of it is rolled into sheets than went to make up the whole world's stock a few years since. A round million of dollars will not express the value of the American product of 1897, notwithstanding its cheapness as measured by former standards. No industry has undergone a greater transformation than this within the decade. And yet we are told that this is only a beginning.—Review of Reviews, New York.

FROM THE MINING CAMPS.

Editor **HARDWARE AND METAL**,—If this reaches you I would like to have you send me **THE CANADIAN HARDWARE AND METAL**, and enclose with the first paper an envelope and order blank and I will send you the subscription fee by return mail. I am not sure of the address.

Yours truly,

F. A. McBRIDE.

Fort Steele, B.C., Sept. 24, 1897.

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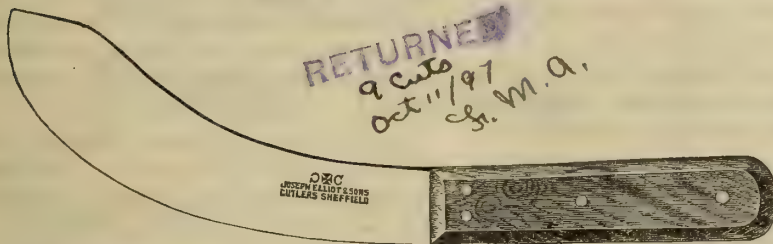
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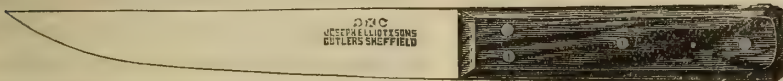
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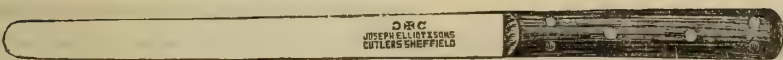
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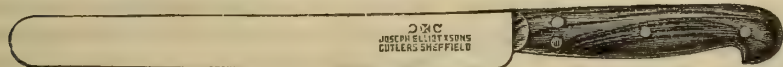
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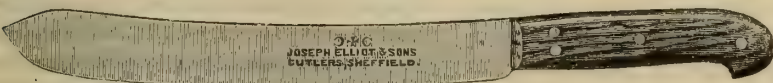
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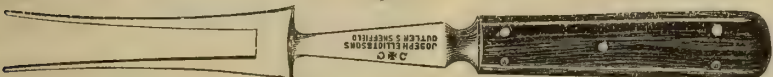
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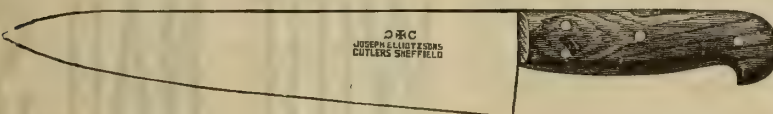
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THE ELECTRIC CAB.

THE electric cab has made its formal appearance in the city of London as part of the carriage service of the great metropolis. These cabs ply for hire in competition with the ordinary hackney coaches, and are run at the same rates. Thirteen are ready for work and twenty-five more are to be added to the number as soon as possible. The Scientific American gives the following details in regard to the construction and operation of these horseless carriages. The new vehicle resembles a shaftless coupe. It is carried on four wooden, solid rubber-tired wheels. The furnishing is luxurious, and ample room is provided for the coachman. The propelling machinery consists of a three-horse-power Johnson-Lundell motor, with double-wound armature and fields, so that by the use of a suitable switch or controller, a variety of speeds can be obtained. The current is supplied by 40 E. P. S traction type cells, having a capacity of 170 ampere hours when discharged at a rate of 30 amperes. The cabs can thus travel between 30 and 35 miles per charge. The storage batteries are hung on springs underneath the vehicle. The manner of getting them into position is important; in the supply station there are two hydraulic lifts, one of very short stroke, the other long enough to raise its platform, which sinks level with the ground floor, up to the charging gallery. The cab is first put over the smaller lift, and under it is run a small iron trolley; this trolley is then raised until the weight of the batteries, some 14 cwt., by the way, is taken. Four pins are removed and the electric connections broken. The lift is then lowered and the trolley run on to the second lift, which raises it to the gallery, where it is run off and placed in position for recharging, the charged cells being taken down and attached to the cab by a reverse operation.

The driving power is transmitted from the motor to both of the rear wheels. For this purpose large driving rings are attached to the spokes, Hans Renold's latest laminated chain being used. It will be remembered that this is not a sprocket chain, but resembles very closely an ordinary leather link belt, except that the links are of steel, and terminated at the under side of each end under the pins in V-shaped pieces, which engage in similar V notches on the driving wheels. The "chain" can therefore play sideways, and the wear is more uniform on that account. Very little noise is made by this gearing, and that which would be made by the motor and the jack-in-box gear, which is arranged on the countershaft, and which is necessitated by the fact that both wheels

are drivers, is deadened by being enclosed in a case thickly lined with felt.

Steering is done by rotating the entire fore carriage, which turns on a ball-bearing racer, and is actuated by a hand wheel.

The whole of these movements are produced by the use of one lever and wheel. The driver has besides a powerful foot brake, which in coming into action breaks the circuit. As yet there is but one electric supply station, but others will be provided at various points in the mammoth city.

BOYS WITH NO CHANCE.

IN another log-cabin, in the backwoods of Ohio, a poor widow is holding a boy eighteen months old and wondering if she will be able to keep the wolf from her little ones. The boy grows, and in a few years we find him chopping wood and tilling the little clearing in the forest, to help his mother. Every spare hour is spent in studying the books he has borrowed, but cannot buy. At sixteen he gladly accepts a chance to drive mules on a canal towpath. Soon he applies for a chance to sweep floors and ring the bell of an academy, to pay his way while studying there.

His first term at Geauga Seminary cost him but \$17. When he returned the next term he had but a sixpence in his pocket, and this he put into the contribution box at church the next day. He engaged board, washing, fuel and light of a carpenter at \$1.06 a week, with the privilege of working nights and Saturdays all the time he could spare. He had arrived on a Saturday and planed fifty-one boards that day, for which he received \$1.02. When the term closed he had paid all expenses and had \$3 over. The following winter he taught school at \$12 a month and "board around." In the spring he had \$48, and when he returned to school he boarded himself at an expense of 31 cents a week.

Soon we find him in Williams College, where in two years he is graduated with honors. He reaches the State Senate at twenty-six and Congress at thirty-three. Twenty-seven years from the time he applied for a chance to ring the bell at Hiram College, James A. Garfield became President of the United States. The inspiration of such an example is worth more to the young man of America than all the wealth of the Astors, the Vanderbilts, and the Goulds.

Among the world's greatest heroes and benefactors are many others whose cradles were rocked by want in lowly cottages, and who buffeted the billows of fate without dependence, save upon the mercy of God and their own energies.

With five chances on each hand and one unwavering aim, no boy, however poor,

need despair. There is bread and success for every youth under the American flag, who has energy and ability to seize his opportunity. It matters not whether the boy is born in a log-cabin or in a mansion; if he is dominated by a resolute purpose, and upholds himself, neither men nor demons can keep him down.—Pushing to the Front.

DEATH OF A ST. JOHN PAINTER.

On Saturday evening, Sept. 25, one of the most prominent citizens of St. John, N.B., in the person of Mr. James H. Pullen passed away. Mr. Pullen has for a number of years been troubled with a weakness of the heart, and on several occasions has been in a dangerous condition, but his robust health always shook off the attacks. Congestion of the lungs set in last week, however, and proved fatal on Saturday evening. He was in his 60th year.

He was born at Dover, England, but came to St. John at the age of 13. For the past 45 years he has carried on a house, sign and decorative painting business in that city. His energy and intelligence secured for him a prominent place in both business and social circles, and his enthusiasm in connection with the various organizations in which he held office will be greatly missed. His business will be continued by Mr. James H. Pullen, jr.

ILLUSTRATION OF NIAGARA'S POWER.

It is estimated at the Engineers' Club of Philadelphia that if pumps were placed below Niagara Falls and one man exerted a force of twenty pounds per stroke and worked fairly eight hours per day, it would take about ten times the total population of the United States to pump the water back as fast as it is flowing over the falls. Consider for a moment, remarks an exchange, what this means. If 70,000,000 persons were engaged in manual labor, all the work they would do could be accomplished ten times over by the power which is now going to waste. In this provision nature has been generous, not only to the United States, but to Canada, for one-half of this power belongs to us.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. McGILL, Gen. Mgr.

Canadian Rubber Company

OF . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
.. Manufacturers of the ..

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

NEW LOCAL FREIGHT RATES.

NEW local freight rates bearing date of October 4 have been put into force out of Toronto, Parkdale, Toronto Junction, North Toronto, Swansea, on iron commodities including bolts, nuts, washers, chain, horseshoes, galvanized iron, iron pipe and fittings, boiler tubes, nails, rivets, fence wire, rope, pig iron, railway bolts, spikes, fish plates, angle bars, etc.

"These rates," said the jobber, "have been put into force at the earnest solicitation of the merchants and manufacturers of Toronto. As a result, shippers are now on an equal footing with Montreal, although we should have had these rates earlier in the year. We did, in fact, have them from the C.P.R., but the Grand Trunk was slow in getting into line. The railways will no doubt be benefitted, because they will now have a double haul—freight into Toronto and freight out of Toronto on the same goods. The most annoying part of the business is that the merchants here have had to agitate so persistently before they could induce the railways to do what they had a right to do long ago," he concluded.

NO CHANGE IN LEAD.

Lead is again on the up grade in England, but the Canadian manufacturers of white lead paint have decided to refrain

from making any further advance this week, and it is just possible that any changes may be delayed until after the close of navigation. The feeling, however, is decidedly upward, with a possibility of dry lead being scarce.

General colors and paints are in good demand, especially such as are used in the implement, carriage and other manufacturing trades. Varnishes, too, are active and prices very strong in response to the continued advance in Kauri gum, which becomes dearer every year.

BICYCLE GUARANTEES.

The all-important question discussed by the bicycle manufacturers at the present time is the "guarantee" problem, and one which should not be entertained for one minute. The guarantee has been an imposition upon the trade and without it they could place a better wheel on the market at a cheaper price. Honest and careful riders would therefore get the benefit.

The bicycle business is fast coming down to a rock-bottom basis, and the expense in making good unjust claims for repairs of all kinds is on this account a big item in the maker's expense account. No doubt the public was well satisfied with the calendar year guarantee, but in view of the reduction

No 013.

PHOTOGRAPH
FRAME

Cut full size.



Including
photograph
75c. each, net

NEW PATTERNS IN

Sterling Silver and Electro Silver Plate

See our line before placing
your Christmas order for
same.

THE TORONTO SILVER PLATE CO. Limited

Factories and Salesrooms: King St. West, **TORONTO, CAN**

E. G. Gooderham, Manager and Sec.-Treas.

in price it should not be entertained. Then, again, it will all depend on the American manufacturer whether the so-called guarantee is in force in this country or not, for any action taken by the Canadian firms will have to be concurrent with theirs. But whether or not, its abolition would serve the best interests of both maker and rider.

BOWMAN, KENNEDY & CO.

A report has been circulated to the effect that Bowman, Kennedy & Co., wholesale hardware and sporting goods, London, Ont., were retiring from business. This is untrue. What is really taking place is a change in the business. The business is going on, and will go on. As a result of the change all the present stock will be cleaned out, after which the firm will be in the field as active and pushing as ever for a continuance of the favors of the customers whose confidence it has secured.

A number of Hudson's Bay Co.'s officials are at present in the city from northern posts. Among the number are: J. K. Macdonald, chief trader, Norway House; Geo. McKenzie, of Abitibi, north of Lake Temiscamingue, in the Ottawa River district, and John Christie, accountant at Isle a la Crosse, who has been spending two months with his parents in Ontario, and leaves for home Friday.—Free Press, Winnipeg.

SOME EARLY TOOLS.

RAKES, hoes and other agricultural implements are represented in the Egyptian catacombs, says an excavator.

Until comparatively recent times the only harrow was a large pile of brush or tree branches, dragged across the field by a team of oxen.

Knives of flint and other stone breaking with a sharp fracture were known in early times. When the Spaniards invaded Mexico the natives had knives of volcanic glass.

Spades and shovels, together with scoops, are found depicted on the walls of Egyptian catacombs and all three are frequently mentioned by Roman and Greek agricultural writers.

The earliest spoons were made of horn. Specimens of ivory and bone have been found in the abodes of the cave-dwellers and lake-dwellers all over Europe. Spoons of gold and silver are mentioned as having been used at Nero's table. In Saxon times every guest brought his own knife and spoon, the host providing a towel or cloth for wiping each at the close of the repast.

The screw was known at an early age in the history of civilization; its invention being attributed to Archimedes and other mechanicians and philosophers. Screw-making machines have been patented, which by peculiar appliances and devices, turn out screws complete in every part. Screws are of many sizes, from the largest, which weigh almost a pound, to the microscopic articles used in the delicate mechanism of the watch. The smallest sized watch screws look like grains of sand and only with a microscope can the fact be discovered that they are perfect.

Hammers are represented on the monuments of Egypt, twenty centuries before our era. They greatly resembled the hammer now in use, save that there were no claws on the back for the extraction of nails. The first hammer was undoubtedly a stone held in the hand. Claw hammers were invented some time during the Middle Ages. Illuminated manuscripts of the eleventh century represent carpenters with claw hammers. Hammers are of all sizes, from the dainty instruments used by the jeweler, which weigh less than half an ounce, to the gigantic fifty-ton hammer of ship-building establishments, some of which weigh as much as fifty tons and have a falling force of from ninety to one hundred. Every trade has its own hammer and its own way of using it.

Pliny says that the first saw was invented by Daedalus, but, according to Apollodorus, it was the invention of Talus, who used the jawbone of a crocodile to cut through a

piece of wood, and then made an iron instrument in imitation of it. The saw is represented on the monuments of Egypt from 2500 to 3000 years B. C. As early as A. D. 1322, saw mills, driven by water power, were in operation at Augsburg, and, it is believed, before this they were in operation in Paris, driven by the current of the Seine. The first saw mill erected in the Norway pineries was in 1530. Saw mills were numerous in Italy in the sixteenth century. They were not introduced into England until 1663, when a native of Holland built one, but was compelled to abandon it by the opposition of the populace, carpenters and other artisans, who saw no good in such a new-fangled contrivance.

The axe is of so great antiquity that its origin is lost, though the Greek legends attribute it to one of their mythical heroes. Stone axes have been found in many countries. Iron axes have been discovered in the Egyptian catacombs, and axes of bronze have been found in almost every land in Europe. Flint axes, for wood cutting, were in use among the Mexican and other Central and South American tribes at the discovery of America. The axes of ancient times were badly made, having most of the weight in front of the handle, and being thus uncertain of aim and ineffective in cutting power. Battle axes are represented on the monuments of Nineveh and Babylon. The battle-axe of Robert Bruce was so heavy, and used with such effect, that, it is said, at the battle of Bannockburn, he clove an Englishman in twain with one blow. The battle-axe of Charles Martel, it is said, weighed thirty pounds.

The first nails were undoubtedly the sharp teeth of various animals; then, it is believed, pointed fragments of flint followed. The first manufactured metal nails were of bronze. The nail with which Jael killed Sisera was a wooden tent pin probably pointed with iron. Bronze nails have been found in the Swiss lake dwellings, in several places in France and in the Valley of the Nile. Until the present century iron nails were forged, a blacksmith being able to make only two or three dozen a day. The first cut-nails were made by Jeremiah Wilkinson in Rhode Island in 1775. The first patented nail machine was by Perkins, 1795, and its product of 200,000 nails a day was considered so enormous that some persons deemed the result due to a supernatural agency. Many improvements in nail making machines, greatly increasing the quantity and quality of their output, have been made in the present century.

Pedlars in Springwells township, Ont., will be charged \$15 in future.

A THREE-WHEELED CYCLE.

Mr. W. J. Jeandron, manufacturer's agent, Toronto, is to be seen about the streets of the Queen City riding a three-wheeled cycle. It is called the "Rex." Mr. Jeandron is Canadian agent for this wheel, and is trying to organize a company to build it in Canada.

The "Rex" cycle is built like the bicycle with the exception that the saddle is attached to a "backbone" sweeping with a curve over the power wheel to a point midway between the centres of the two rear wheels, where it terminates and is attached to the trailer-head. The trailer is a small wheel which is attached by means of forks to a "head" built on the same principle as the steering head. The small wheel trails behind on the principle of a castor. It is supposed to carry a third of the weight, thus relieving the middle wheel of almost one-half of the weight. For this reason hill climbing is supposed to be rendered easy, and jolts are not felt by the rider. Another office of the trailer is that it prevents slipping, as it immediately turns right angles with the power wheel should it slip. The manufacturers claim an 88 gear on the "Rex" is as easy as a 64 on a bicycle.

CHATHAM C.W.A. MEET STATISTICS.

A meeting of the Chatham Cycle Club was held the other evening, and a detailed statement of receipts and expenditures was presented by the treasurer, Mr. James Innis, in connection with the annual meeting of the Canadian Wheelmen's Association, which was held in that city on July 1, 2 and 3. The receipts of the big meet were \$3,596.89, and the expenditure, \$3,638.54. The accounts still outstanding are \$226.30, and the amount still due the Meet Committee \$405. These last accounts have been handed to a solicitor to collect, as the Meet Committee are determined if possible to pay every account contracted for in full, and it is only by collection of accounts due that this can be done.

NEW BICYCLE TOURIST LAW.

A new law relative to tourists' wheels has lately gone into force in the United States under which Canadian made machines are permitted to cross free for three days only, while riders of American-made wheels are obliged to sign six sets of clearance papers before being permitted to cross the boundary. Bicycles can no longer be brought into the States as personal effects. Under the Dingley bill they are subject to duty.

The general stock of A. G. Lang, of Hespeler, valued at \$1,846, was sold to Amanda Lang, of that place. The price paid was 46 cents on the dollar.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No. 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

TURN IN TORONTO REAL ESTATE.

THE millstone around the neck of Toronto during the last five or six years has been the depression in real estate due to the collapse of the boom of ten years ago. And many are the business men who were dragged down to bankruptcy, while many others have been brought near enough to destruction to be made to tremble.

There are now, however, signs that this millstone is gradually slipping off the neck which it has so persistently held down for several years. And the signs cannot be mistaken.

HARDWARE AND METAL has it from unquestionable authority that during the past four or five weeks there were more transactions in Toronto real estate than there were during the two years previously.

Sites for factories have been sold, and in at least one instance the work of taking out the foundation was begun the day after the land had been acquired. And besides the actual transactions there have been enquiries for land and offers made thereon which a year or two ago could not be sold at any price.

It is true the prices at which the transactions were as a rule made were low, but the fact that properties have sold for which a short time ago a purchaser could

not be found at any figure is certainly a gratifying sign. Then, the eager way in which certain properties have been picked up at prices named before the Court of Revision, when assessments were being appealed against, is another striking feature of the situation.

As far as residential property is concerned a decided improvement is to be noted. It is not that rents are any higher or that properties have appreciated in value; it is in the fact that there are not nearly as many vacant houses, while there is an increased difficulty of securing dwellings to rent. There are houses which, after being vacant for two years or more, have quickly found tenants after being overhauled a little. Anyone who will look about him will notice the tendency there is to overhaul premises which have for some years been unoccupied. And the owners would not do this unless they saw a rift in the cloud.

Of the different descriptions of real estate the slowest to feel the turn in the tide is store property. This class of property, in addition to the general depression, has suffered from the effects of the department stores. But even store property has improved. By actual count about a year ago one hundred and thirty-seven stores were found to be vacant within a distance of about two miles on one of the principal streets of

the city, while an inspection of the same thoroughfare within the past few weeks found a most material reduction in the number.

No one will be more pleased than the business men that Toronto is at last emerging from the hard times brought upon it by an unfortunate real estate boom.

LIGHT EDGE TOOLS DEARER.

Light edge tool manufacturers in Sheffield have advanced the price of their product 15 per cent., a circular to that effect having been received by the hardware trade in Canada.

The cash discount has also been reduced to 2½ per cent. It was 5 per cent. formerly.

The cause of this advance is the increased cost of manufacture. And the increase in the cost of manufacture is doubtless due to the fact that the workmen are on strike, notwithstanding the advance accorded a few months ago, while the demand is exceedingly brisk.

The circular referred to is signed by these manufacturers: Ward & Payne, William Marples & Sons, Turner Naylor & Co., Robt. Sorby & Sons, Limited, James Howarth & Sons, Thomas Ibbotson & Co., Hearnshaw Bros.



Stove Boards

Established 1860
Incorporated 1895

SEAMLESS

Lithographed and Crystallized. No caps on corners to catch the dust or get pulled off. All new designs. Send for samples.

COAL HODS
STOVE PIPES
ELBOWS
FIRE SHOVELS, Etc.

THE THOS. DAVIDSON MFG. CO.
MONTREAL Limited

WINDOW DRESSING IN SMALL PLACES.

At a meeting of merchants in Chicago recently the fact was brought out that in towns of about 2,000 inhabitants many merchants do not give window dressing much attention. The Chicago Dry Goods Reporter makes some remarks on this subject which apply with equal force in this country. It seems that there are still merchants, thousands of them, who do not believe, or who have not yet had it proved to their satisfaction, that the benefit in dollars and cents resulting from fresh, attractive window displays is not worth the small addition to the store expense and the necessary time and thought.

They say that it may pay in cities and large towns, where people lay much importance to style and appearances, but that in small towns it would be of no avail as a trade winner, for there is no style there; customers are satisfied if they have their plain food and plain dry goods served to them in a plain fashion, and to make any extra effort in the way of window displays and store decorations is like "casting pearls before swine."

If it were not a fact that there are merchants in all kinds of towns and cities who attribute a good share of their success to the way in which they keep their windows, it might be conceded that there are exceptions to the rule that "window dressing pays." The abundance of cases of this kind and the scarcity or absolute non existence, so far as we know, of a case where window trimming has been given a fair trial without building up the trade and reputation of the store, leaves, it would seem, little to be said in order to convince several thousand merchants of the error of their way.

Not a few who admit the value of window displays do not attempt anything of the kind themselves because they have an exaggerated idea of the skill and artistic ability it takes to produce them. As a matter of fact, anyone who has had experience in handling dress goods and merchandise ought to be able to put in a window display that would be a credit to the store. Practice makes perfect, and if the same person is given the work to do steadily there is no question that the displays will improve, and in time bring recognition from the public. A display does not have to be as good as the best that are seen in the largest cities to be of value as a trade winner. There may be many degrees of excellence, and because it is impossible to produce displays of the first degree it is absurd to suffer the windows to fall into neglect.

If any merchant chances to read this article who is among the number that are

now awake to the possibilities of window-dressing, let us urge you to do something—no matter how little—in this line before the decline of the fall trade. The size of the town has not a great deal to do with it. No matter if the store is located at a cross- corners, it would be strange if there were not someone who would appreciate a neat window display.

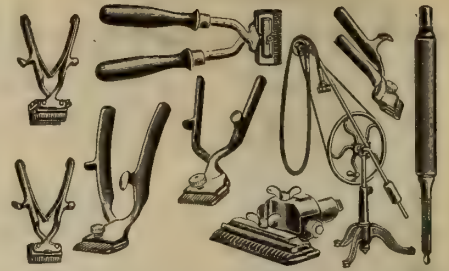
In every small town there are people who are lured away to larger places to do part of their trading. In a great many instances they can do no better than at home, but they are impressed with the idea somehow or other that their home merchants are not up-to-date. It may be discovered that it is not the lack of goods so much as it is the poor way in which the goods are displayed that drives trade to other towns. This is an old, old truth, and it ought not to be necessary to repeat it and discuss it so often, yet this space is not begrudged if it gives anyone a better appreciation of the art of window trimming.

FOR HARDWAREMEN AND PLUMBERS.

The attention of the trade is called to the advertisement on page 33 of Smith & Egge Manufacturing Co., Bridgeport, Conn. The cut represents a new revolving punch, which they have placed on the United States market with great success. They manufacture a full line of belt punches, that are standard goods throughout the world; also a full line of window sash pulleys, sash fixtures, etc., all of the latest improvements in these lines. They are one of the largest manufacturers in the United States of cable chains, improved lock-link chains, etc. Among their many lines are drill chucks, adjustable socket wrenches, padlocks in many varieties; in plumbers' goods, closet pulls, chains, snaps, hooks, straps with rubber bumpers, holders, etc. Dealers will do well to send for their new catalogue and mention this paper.

RELIABLE SELLING AGENTS.

One of the most reliable and experienced firms of selling agents in Canada is that of Estey & Co., St. John, N.B., who represent several first-class manufacturers dealing in railroad, mill, and steamboat supplies, steel in all forms, steam pumps and fittings, etc., brass and copper pipe, bar iron, spikes, galvanized sheet iron, machine and carriage bolts, nuts, set-screws, car fittings, etc.; hose and rubber goods of all kinds. They are prepared to represent a few more manufacturers and producers in all lines, their experience enabling them to select desirable buyers. Manufacturers and others desirous of extending their business in the Maritime Provinces should correspond with Estey & Co.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods. We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

CUTLERY

H. BOKER & CO.



RAZORS, SCISSORS, PENKNIVES

Caverhill, Learmont & Co.

MONTREAL

CANADA 18 x 21 x 60 sheets

18 x 24 x 52 “

18 x 24 x 60 “

18 x 24 x 75 “

20 x 28 x 41 “

**Half
Bright**

18 x 21 x 60 “

18 x 24 x 52 “

**All
Bright**

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.



FIRE PAILS

that do not water-soak because they are impervious to liquids—that do not burst their hoops because they have none—that cannot leak because they have no joints or seams—that can be used “for fire only” because

they have round bottoms—that do not break because they are made of Indurated Fibreware—are manufactured in Canada only by

The E. B. EDDY CO., Limited

HULL, MONTREAL and TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Oct. 8, 1897.

HARDWARE.

THE general tendency in hardware and iron is buoyant, and with values pointing upward, with but few exceptions, it is natural that buyers should be more urgent, as is the case this week. Barbed wire, while exhibiting a firmer tendency, is not quotably changed, and the unsettled disposition on plain wire and wire nails continues. In all other lines firmness is the rule. Makers have met and confirmed old prices on cut nails, horse nails, and horseshoes, while they have advanced prices on bolts. Demand is active for all, and also for cordage, which has advanced $\frac{1}{8}$ c., building paper, ware, cutlery, and sporting goods. Extensive transactions in cement have also been a feature of the week on western account.

BARBED WIRE—In consequence of the appreciation in raw material there is a firmer feeling in barbed wire, but quotations are as yet unchanged on the basis of \$2.25 f.o.b. here. Demand is somewhat better than it was.

PLAIN WIRE—Business in plain wire has not been increased to any appreciable extent by the competition between makers. Discounts here continue at 30 and 10 off.

WIRE NAILS—The basis is \$1.85 to \$1.90 f.o.b. Montreal.

CUT NAILS—The makers at their meeting this week simply confirmed the old basis and conditions on cut nails, though some people looked for an advance. Accordingly, we repeat the old basis of \$1.85 f.o.b. Montreal, Toronto, Hamilton and London, with 10c. per keg rebate. Demand during the week has been better than it was before.

HORSE NAILS—Makers made no change in the basis on horse nails at their meeting and discounts remain at 50 per cent.

HORSESHOES—Old figures on horseshoes have been confirmed by makers, and prices remain as they were last week. A good demand is experienced. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is no change to report in screws. Discounts are: Flat head, bright,

87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—In moderate enquiry and unchanged at 12½ per cent.

BOLTS—The makers' meeting has resulted in an advance in bolts of from 5 to 7 per cent. The basis has also been rearranged somewhat differently. Discounts are now: Carriage bolts, $\frac{1}{4}$ and 5-16, 70 per cent.; $\frac{3}{8}$ and up, 60 and 10; machine bolts, $\frac{1}{4}$ and 5-16, 70 per cent., and $\frac{3}{8}$ and up, 65 and 10.

RIVETS—No change has yet been decided on in rivets. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—Without change, a fair lot of orders being noted.

FILES—As last reported. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—Makers have advanced their quotations on sisal and manilla, and the jobbing price has followed suit, being $\frac{1}{8}$ c. higher than it was. We quote: Sisal, 7-16 and upwards, 6c.; $\frac{3}{8}$, 6½ c.; 5-16

and $\frac{1}{4}$, 7c., and 3-16, 7½ c.; manilla, 7-16 and upwards, 7½ c.; $\frac{3}{8}$, 7¼ c.; 5-16 and $\frac{1}{4}$, 8½ c., and 3-16, 8½ c.

CHURNS—There has been a good enquiry for churns.

CLOTHES WRINGERS—Continue as they were last week.

BUILDING PAPER—There is a good volume of trade to report in building paper. We quote 25c. for plain building, 35c. for tarred lining, and \$1.30 to \$1.40 for roofing.

LEATHER BELTING—Continues in fair enquiry with prices steady.

WARE—A good trade is doing in all kinds of ware.

HINGES—Business is satisfactory. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

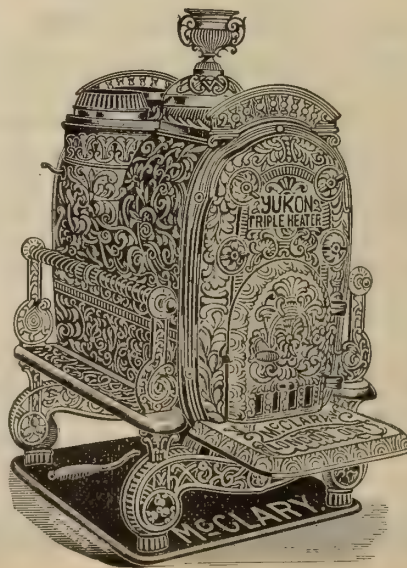
CUTLERY—Assortments of cutlery are well enquired for, the volume of orders being well maintained.

SPORTING GOODS—A brisk trade is noted in guns, rifles and ammunition.

SHOT—The firm feeling in shot continues and demand is brisk. We quote: Dropped shot, 6c.; chilled shot, 6½ c., and buck-shot, 7c., less 12½ per cent. trade discount.

CEMENT—The activity in cement continues, many large lots moving on western account. Arrivals have been considerable of late, but the bulk was sold to arrive, and the firm tendency of prices is fully main-

YUKON TRIPLE HEATER



The most complete and effective
Heater made in the Dominion.
Takes 30-inch wood.

Size of fire door opening 11 x 14¼ in. Shipping weight 460 lbs. Large hearth. 4-piece sectional linings that can be replaced through front door. Direct or indirect draft. Fire travels the entire length of stove three times before entering smoke pipe. Flues easily cleaned from front. Two very effective hot air flues that will distribute heat equally; one cannot rob the other. Strong leg base and nicked rails packed inside of stove for shipping.

List Price = \$33.68.

Order a sample early.

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver.

BARB WIRE

A complete stock of 2 and 4 point carried at Toronto and Montreal. Get our prices. Import orders filled promptly and at lowest prices.

A. C. Leslie & Co., Montreal

Iron and Steel Merchants and Manufacturers' Agents.

Portland Cements

Imported and Canadian.

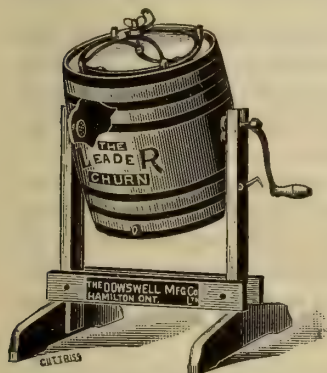
Calcined Plaster

Mortar Color

F. Hyde & Co.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.



FISHING TACKLE

Our stock is most complete in all kinds of Sporting Goods

Consisting of

Fishing Tackle, Lacrosses, Footballs, Boxing Gloves, Punching Bags, Baseball Goods, Camp Sets, Folding Furniture, Hammocks, etc., etc.

Send for Catalogue B.

**The Wightman
Sporting Goods Co.**

403 St. Paul St.

MONTREAL

tained, especially on English brands. We quote: English \$2.05 to \$2.15, and Belgian \$1.85 to \$1.95 per bbl. ex wharf.

FIREBRICKS—An active trade is noted in firebricks, prices ruling steady at \$16 to \$21 per 1,000, as to brand.

METALS.

The improvement in all branches of the heavy iron and metal trade continues and values all round have a firm tone. All the large manufacturing establishments in the United States report their order books well filled, in many instances up to the end of the year, and advances have been made all along the line.

PIG IRON—The firm feeling in pig is maintained, though there has been no quotable change in values. Transactions noted during the week included 50-ton lots of Summerlee at \$17.50 to \$17.75 ex yard. No new business is noted in American pig. We quote: No 1 Hamilton, \$16; No. 2, \$15; Ferrona, \$14 to \$15; Siemens, \$14 to \$15; Summerlee, \$18; Carron, \$18 Ayrsonne, No. 1, \$17; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—The firm feeling in bar iron noted last week continues, and jobbers note a good enquiry at the advance, \$1.40 to \$1.50, as to quantity.

BAND IRON—Rules firm in sympathy with the general disposition of the market. We quote the base price at \$1.70.

HOOP IRON—The advance in the States has naturally had a stiffening effect, though prices are not quotably changed as yet from \$2.25 to \$2.35.

SHEET STEEL—In good enquiry and prices firmly held at \$2.35.

SHEET IRON—Prices are steady on the basis of \$2.25, with a good trade doing in all the staple gauges.

GALVANIZED IRON—Trade continues brisk in galvanized sheets, and prices steady on the basis of \$4 to \$4.15 for Queen's Head, with other brands up to \$5.25, according to the brand.

TINNED IRON—Continues in good enquiry, with prices firm on the basis of 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges the usual extras.

LEAD PIPE—There is a good enquiry for lead pipe under the influence of an upward tendency in values. We quote lead pipe 7c. per pound and composition and waste 7½c., subject to a discount of 27½ per cent.

PIG LEAD—Is again firmer, with an advancing tendency. We quote \$3.85 to \$4.

INGOT TIN—The same can be said of tin, with a fair demand at 16c.

INGOT COPPER—Has an upward tendency, though prices are not quotably altered from 12 to 12½c.

SHEET COPPER—Good demand. We

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

.. MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
" "	Rivet Iron	AVB
" "	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
" "	Rivet Iron	AXB
" "	Stay Bolt Iron	AXB
" "	Hammered Iron	AHB
" "	Charcoal Iron	ACB

**Tyre, Sleigh Shoe,
Axe and Rivet STEEL.**

NOVA SCOTIA STEEL Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

**FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING**

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

Blue Hoop Horse Shoes

"1897 MODEL"

are in great demand. Sales increasing every day. Freights will advance shortly. Better send in your Fall order immediately and secure a supply of the famous "**Blue Hoops.**" All good Farriers insist on having them.

Manufactured only by

THE PILLOW & HERSEY MFG. CO. LIMITED - MONTREAL

quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

CANADA PLATES—In fair enquiry with prices steady. We quote \$2.10 to \$2.25.

TIN PLATES—There is a fair enquiry for tin plate, a feature being the scarcity of charcoal, especially of 20 x 28. Cokes are in better supply. We quote: Coke I. C., \$3 to \$3.15; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.80.

TERNE PLATES—Continue in good demand, with values held steady at \$6.

BOILER PLATE—There is no change, the basis being \$1.90 to \$2.

COIL CHAIN—Moving out well on the basis of \$2.85 for ⅝ up.

SHEET ZINC—Ranges from 5 to 5¼c., with a good enquiry.

SOLDER—Quiet and unchanged at 11½c.

SPELTER—As last reported, at \$4.75.

ANTIMONY—Unchanged on the basis of 9½ to 10c.

IRON PIPE—Makers having advanced their prices on iron pipe, jobbers have marked up their prices all round. We now quote as follows: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1¼-inch, \$5.35; 1½-inch, \$6.90; 2-inch, \$9.35; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—The firm feeling in scrap iron continues, and purchases that have been made this week called for a further advance. In fact, \$13 for No. 1 is a very rare price now, and we quote \$13.50 to \$14.

PAINTS, OILS, ETC.

The makers are meeting this week, and an advance is expected in the price of white lead. In the meantime quotations stand as they are. Turpentine has been advanced 1c. per gallon.

WHITE LEAD—Quotations are nominally

unchanged in these on the basis of \$5.37½.

RED LEAD—In good enquiry. We quote: Genuine in casks, 4½c.; kegs, 4¾c.; No. 1 in casks, 4¼c., in kegs, 4½c.

LIQUID PAINTS—As last noted.

PUTTY—Active and steady. We quote: Bulk, \$1.60; bladder in barrels, \$1.75; tinned in cases, \$2 per 100 lbs.

LINSEED OIL—Quiet and steady. Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Firm, as last quoted, at 47c. in single barrels, and 5-barrel lots, 1c. per gallon less.

GLASS.

An advance in window glass is looked for, though it has not yet materialized. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

ASHES.

Demand has fallen off for these, as buyers have satisfied their wants for the time being, and prices are lower than they were, at \$3.50 to \$3.60 for first pots, and seconds, \$3.25. Pearis are much wanted, but there is no stock offering.

CHEMICALS, ETC.

There is no change in heavy chemicals. We quote: Bleaching powder, \$2 to \$2.50; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.75 to \$2.25; do. roll, \$1.75 to \$2.25; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

HIDES.

Quiet; lambskins, 50c. each, and beef hides, 6 to 8c., as to grade.

PETROLEUM.

There is a fair enquiry for petroleum. We quote: Canadian, 13½c. in car lots and

14½c. in smaller quantities; American, 16½c. in car lots and 17½c. for small lots.

COAL.

Still unchanged. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

The price of bolts has been advanced.

Makers have simply confirmed old values on cut nails, horse nails and horseshoes.

Sales of cement have aggregated 4,200 barrels of Belgian at \$1.85 ex wharf, all on western account.

Manufacturers have advanced their price on iron pipe fully 7½ per cent., but jobbers have not figured out the rise yet and quote the old range.

Arrivals of cement for the past week were 1,000 barrels Belgian and no English, as against 10,784 Belgian and 4,200 English for the previous week, making to date 100,379 Belgian and 27,000 English.

Labelle & Deschamps, of Montreal, have secured the contract for the plumbing, heating and ventilating of two houses for Thomas Samuel & Son, Westmount; also another for the plumbing and roofing of two houses for S. D. Vallieres.

ONTARIO MARKETS.

TORONTO, Oct. 8, 1897.

HARDWARE.

BUSINESS has not deteriorated during the week. On the contrary, if there has been any change at all it has been towards an improvement. The manufacturers have been considering prices and some slight changes have been made, all in the direction of higher values. Wire nails are dearer in Montreal, but no change has so far been made here. Slight changes have been made in certain lines of bolts, and sisal rope has regained the one-eighth it lost a few weeks ago. Orders this week appear to cover a wider range of goods.

BARB WIRE, ETC.—A slight increase in the demand is reported, but orders are only

Rock-Faced Brick

Sheets cover when laid $22\frac{1}{2} \times 17\frac{1}{2}$ inches. 37 sheets to a square (100 square feet).

Bricks are $7\frac{1}{2} \times 3$ inches.

Sheets are laid from LEFT to RIGHT, the narrow flanges overlapping the wide flanges.

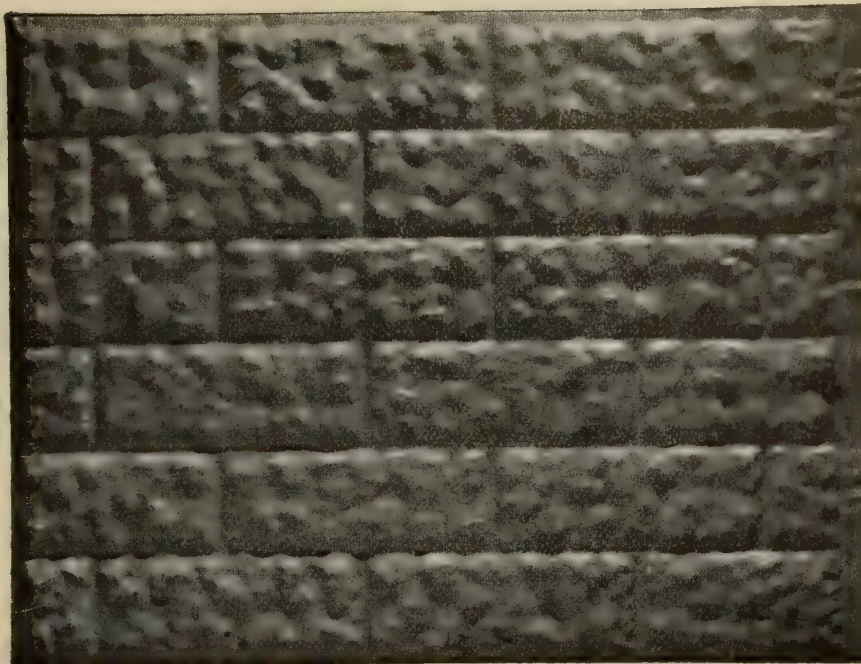
Illustration is an exact photographic reproduction of one single sheet.

This Siding (our latest production) is a very careful reproduction in sheet metal of the very best pressed Rock-Faced Brick, and cannot easily be distinguished from it.

- CONSTRUCTION -

This Siding is so constructed that the sheets have a plain flange on all four sides, which overlap each other at the top and side. The overlapping flanges are the same width as those which divide the stones or bricks on each sheet, so that the joints are not noticeable, and every line of joint is crossed or broken.

In this way the objectionable features which characterize other makes of siding, where locks are used on the sheets, making an unsightly seam very unlike real stone or brick, are entirely removed in these Sidings, imparting a character to the work, and making them unquestionably the very latest improved and best up to date Sidings yet produced for covering the exterior walls of all classes of buildings.



Sole Manufacturers

RETURNED
Nov 11th/97, J. M. Q.

THE METALLIC ROOFING CO. of CANADA, Limited

HEAD OFFICE AND FACTORY,

Cor. King and Dufferin Streets, TORONTO, ONT.

WRITE FOR QUOTATIONS.

The Originators and Pioneers and most extensive makers of sheet metal building material in Canada.

for very small quantities. As far as can be learned, stocks of barb wire on the Toronto market are all exhausted. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE—Quiet and unchanged. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—No feature to note. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—A new price has been decided upon for Montreal, but locally the old figures still obtain. We quote \$1.85. Orders are coming in more freely.

CUT NAILS—Quantities wanted are smaller than a week ago. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSESHOES—Toronto, Hamilton and London are no longer delivery points. The price is now \$3.25 f.o.b. Montreal.

SCREWS—The demand continues fair at unchanged prices. Discounts are: Flat head bright, $87\frac{1}{2}$ and 10; round head bright, 80 and 10; flat head brass, $82\frac{1}{2}$ and 10; and round head brass, 75 and 10

per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Not much doing. Discount, $12\frac{1}{2}$ per cent.

BOLTS—The discount has been changed on some lines. Discounts are as follows: Common carriage bolts, 3-16, $\frac{1}{4}$, $\frac{3}{8}$ and 5-16, 60 and 10 per cent.; full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, $\frac{3}{8}$ and larger, 4c. per lb.; 5-16, 5c. per lb., $\frac{1}{4}$, 6c. per lb.

RIVETS AND BURRS—Trade is fair. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to $2\frac{1}{2}$ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

BRASS BUTTS—Business is moderate. Discounts are $17\frac{1}{2}$ per cent.

ROPE—Sisal rope has regained the $\frac{1}{8}$ c.

it lost a few weeks ago, the base price being again 6c. Manilla rope is unchanged, a good many orders for which are being received. We quote: Sisal, 7-16 in. and larger, 6c.; $\frac{3}{8}$ in., $6\frac{1}{8}$ c.; $\frac{1}{4}$ and 5-16 in., 7c.; 3-16 in., $7\frac{1}{2}$ c. Manilla, 7-16 in. and larger, $7\frac{1}{8}$ c.; $\frac{3}{8}$ in., $7\frac{3}{8}$ c.; $\frac{1}{4}$ and 5-16 in., $8\frac{1}{8}$ c.; 3-16 in., $8\frac{3}{8}$ c.; deep sea line, $13\frac{1}{2}$ c. for water laid, and $14\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—The improvement noted last week continues. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Quiet and unchanged. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Trade is steady. Discount, 45 and $2\frac{1}{2}$ per cent.

BUILDING PAPER—Orders are not nearly as large, but they are more numerous. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.

LEATHER BELTING—Business keeps moderate. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—There is a fair demand for enamel ware, but there is not much doing in tinware.

CUTLERY—Trade continues good in all lines.

SPORTING GOODS—Guns, rifles, ammunition and sporting goods generally are still in active demand.

HINGES—Business much as before. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CEMENT—The market is busier this week, the farmers having commenced to buy in large quantities, and the local trade is picking up. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.50; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 per barrel.

METALS.

Trade is fairly good in metals, being especially so in galvanized and black iron, sheet steel, Canada plates and ingot tin.

PIG IRON—There is not much doing, but the market rules firm.

BAR IRON—Quite a number of orders of fair dimensions have been received during the week, and business is on the whole better than it was a week ago. We quote base price at \$1.40 in carload lots at Toronto and \$1.50 in smaller quantities.

HOOP AND BAND IRON—There has been a freer movement in both lines. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$20.

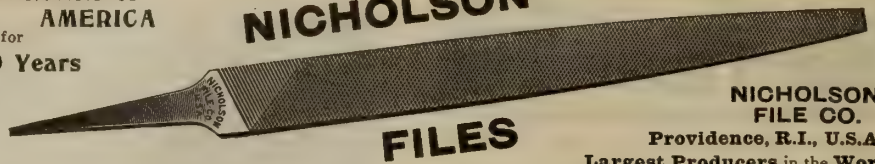
SHEET STEEL—A nice trade is being done in both No. 1 and No. 2 qualities. We quote: 12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—The demand is also good in this line. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade has been exceptionally brisk during the past week, with the result that quite a number of orders remain on the books. The demand is principally for American iron, which is scarcely obtainable, particularly in the lighter gauges. Stocks of English iron are also light. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G., 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (case lots), 28 gauge, \$3.80;

STANDARD of
AMERICA
for
30 Years

NICHOLSON



FILES

NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6⅞ to 7⅞c. per lb.

LEAD PIPE AND TRAPS—Demand keeps good. We quote as follows: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 percent. on \$25 lots and over.

PIG LEAD, ETC.—Shipments are small, with prices steady. Bar lead is firmer. We quote pig lead at 4 to 4¼c., and bar, at 4¼c.

SHOT—Business continues good. We quote: Dropped shot, 6c.; chilled do., 6½c.; buckshot, 7c. Discount, 12½ per cent.

SOIL PIPE—Trade is better than it has been. Discount is 60 and 10 per cent.

INGOT TIN—While the orders are small they are numerous, and a great deal of tin has been shipped. We quote 16¼ to 16½c. per lb.

INGOT COPPER—A few small shipments have been made. Prices vary from 12 to 12½c. per lb.

SHEATHING COPPER, ETC.—Trade has been a little better this week, especially in braziers'. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Demand is rather slow and there has been some fluctuation in prices. We quote: Wrought, ¼ to ¾ inch, 1⅞c.; ½ inch, \$2.25; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

RANGE BOILERS—Business continues good. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—These are moving freely, all kinds from 52 to 75 sheet boxes being wanted. All-bright is still scarce. We quote: \$2.45 for half-polished, 52 sheets, and \$2.85 for all-bright, the lighter iron running the usual advance.

TIN PLATES—A nice business is reported in these, particularly in 20 x 28, although cokes and squares have come in for a good share of attention. We quote:

Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Are still in good demand. We quote: I.C., \$6 to \$6.25; I.X., \$7.50.

COIL CHAIN—Quiet. We quote: $\frac{1}{4}$ in., 4 $\frac{1}{2}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET LEAD—Unchanged at 4 $\frac{1}{4}$ c. f.o.b. Toronto, with 10c. per 100 lbs. advance for Hamilton.

SHEET ZINC—Is going out freely at unchanged prices. We quote: Imported, 5 $\frac{1}{4}$ c. in ton lots, and 5 $\frac{1}{2}$ c. in smaller quantities.

SOLDER—Trade is fair. We quote: Standard, 11c.; strictly half and half, 11 $\frac{1}{2}$ to 12c.

ANTIMONY—Business is much about the same as it was a week ago. We quote: Cookson's, 8 $\frac{3}{4}$ to 9c.; other makes, 8 $\frac{1}{4}$ to 8 $\frac{1}{2}$ c.

GLASS.

The demand is only fair, and is chiefly for special sizes in which dealers who had

imported in the spring are short. We quote: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

OLD MATERIAL.

Business in this line is fair in all branches. The only change from last week is in scrap rubber, which has advanced $\frac{1}{4}$ c. all round. We quote as follows. Agricultural scrap, 40c. per cwt.; machinery cast, 42 $\frac{1}{2}$ c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7 $\frac{3}{4}$ c. per lb; bottoms, 7 $\frac{1}{2}$ c.; heavy copper, 7 $\frac{3}{4}$ to 8 $\frac{1}{4}$ c.; light scrap brass, 4 to 4 $\frac{1}{2}$ c.; heavy yellow scrap brass, 5 $\frac{1}{2}$ c.; heavy red scrap brass, 6 $\frac{3}{4}$ c.; scrap lead, 2 $\frac{1}{4}$ to 2 $\frac{1}{2}$ c.; zinc, 2c; scrap rubber, 3 $\frac{1}{4}$ to 3 $\frac{1}{2}$ c.; good country mixed rags, 50 to 60c.; clean dry bones, 30 to 35c per 100 lbs.

PAINTS AND OILS.

The market for painting material rules strong and choice brands of white lead are being rushed out as fast as they can be

matured. The near approach of the winter rates of carriage will make the majority of grinders exceedingly busy, and it will be well if dealers will make up their fall lists as early as possible. There is a fair movement in the cheap and medium qualities of glue and the supply is limited. White and fish glues are quiet. In painters' sundries, such as gold leaf, fillers and surfacers, a better demand is being experienced than for some time past at this season. Ready-mixed paints are going out spasmodically, warm weather continuing to make business, and cool weather, in turn, checking it. Red lead, orange mineral and litharge are slightly higher, with a brisk demand. Colors ground in oil and coach colors, no change. Putty, firm with higher prices in sight. Turpentine has advanced 3c. per gallon.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12 $\frac{1}{2}$; No. 2, \$4.75; No. 3, \$4.37 $\frac{1}{2}$; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100

The Secret

All successful business men make their money by turning it over fast

TO DO THIS you must buy only

Up-to-date
Quick Selling GOODS.

The attractive appearance of . . .

Moore's NEW BERMUDA
NEW FLORIDA

catch a customer's eye at once.

An examination of their many points of SUPERIORITY SELLS THEM.

Their durability, economy and perfect operation recommend to you another customer.

These are profitable goods to handle.

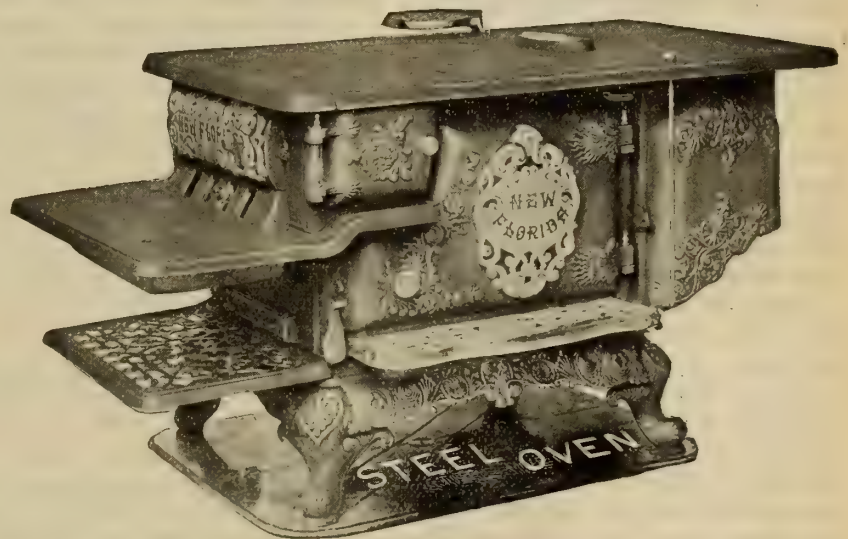
Manufactured by

THE D. MOORE CO.

Limited

HAMILTON, ONT.

Watch for our Double Heater, TODD.



lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—26c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.75 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 52c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

HIDES, SKINS AND WOOL.

HIDES—Market is easier in sympathy with decline in Chicago, but prices are yet unchanged. Quotations are: Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—The season is about over, not many offering. Prices are: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—Best fresh taken off are quoted at 75 to 85c.; country lots from 75c. down.

WOOL—Little or no Canada fleece wool left, all being disposed of. Pulled wools are in fair demand, and foreign wools also find a ready sale as substitute for Canada fleece. Dealers are paying 20 to 20½c. for pulled wools.

SEEDS.

There is quite a lull in the market, the number of enquiries of ten days or so ago having largely subsided. Values remain same for alsike and timothy. The low market for red clover in the United States will reduce prices here. Alsike is quoted at \$3.50 to \$4.50 per bushel, superior grades bringing higher figure. Red clovers, \$3.10

to \$3.25 per bushel. Timothy, machine threshed, 90 to \$1.25, and choice unhulled brings a slightly higher figure.

PETROLEUM, ETC.

The market is unchanged, fall orders still coming in. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

Scrap rubber is ¼c. dearer.

Sisal rope has been advanced, the base price now being 6c.

Stoves, furnaces, stove boards, elbows, coal hods, etc., are all going out freely.

There was a small fire in the factory of the A. E. Kemp Manufacturing Co. a few days ago.

Horseshoes are now quoted f.o.b. Montreal, the cities of Toronto, Hamilton and London no longer being delivery points.

H. S. Howland, Sons & Co. have advices of a shipment of Eley's goods, including job shells 12 x 16 gauge. These shells have been scarce for some time.

H. S. Howland, Sons & Co. are in receipt of a shipment of prospectors' and surveyors' compasses, also prospectors' magnifying glasses. These are articles which are wanted in the mining sections of the country.

The office of the Graham Nail Works was visited by fire on Tuesday, the day following the blaze at the Central Prison. The office was pretty well scorched, but the factory and store rooms fortunately escaped injury.

UNITED STATES MARKETS.

NEW YORK, Oct. 5, 1897.

PIG TIN—Purchases by consumers were more liberal, and there was better business also with out-of-town jobbers. That movement and slightly better London advices gave the market decidedly better tone, carrying prices to 13.70 to 13.75c. f.o.b. for lots of five tons or more, prompt or near future delivery. There was, however, no sign of a revival of purely speculative interest here.

COPPER—The market was rather dull and slightly easier. Lake Superior ingot appeared less difficult to buy at 11¼c. for prompt or future delivery, and over 11c. for electrolytic, or 10¾c. for casting stock was quite the exception. Export business is not up to the late average, and home consumers are buying very indifferently. London reported a very slow speculative market.

PIG LEAD—The market remains in rather dull condition, with freer offerings here and

in the west, and slightly lower prices quoted at both points. Open offers to sell at 4.25c. here were made and counter bids above 4.20c. seemed extremely few. London cable was £13 15s. for soft Spanish.

SPELTER—Operations are still on a very moderate scale, but the market is steady in the absence of freer or anywise urgent offering. About 4.30c. for prime western, delivery here or at common point, may fairly be quoted. London cable was £17 17s. 6d. for good merchant brands.

ANTIMONY—The market remains quiet, but steady. We quote at 8 to 8½c. for Cookson's; 7¼ to 7¾c. for Hallett's, and 7 to 7½c. for Japanese.

TIN PLATE—Business of fair volume only is being effected and prices continue low and irregular, but without radical change.

IRON AND STEEL—In pig iron there is a very fair business, mostly on orders for moderate quantities for near future use. The dealings are mostly at former prices, and the tone of the market remains steady.

Manufactured goods generally are without change in prices, and nothing more than fair business is doing in any department.

HUMOROUS SIGNS.

Of unwittingly ludicrous or humorous signs there are plenty. A tinsmith near Exeter, England, has a sign which reads:

"Quart measures of all shapes and sizes sold here."

At a market town in Rutlandshire the following placard was affixed to the shutters of a watchmaker who had decamped, leaving his creditors mourning:

"Wound up and the mainspring broke."

Equally apposite was one in Thomaston, Ga. On one of the principal streets the same room was occupied by a physician and a shoemaker, the disciple of Galen in front, while he of St. Crispin worked in the rear. Over the door hung the sign:

"We repair both sole and body."

On the windows of a London coffee room there appeared the notice:

"This coffee room removed upstairs till repaired."

The proprietor of the place was not an Irishman, though the framer of the notice over the entrance to a French burying ground, "Only the dead who live in this parish buried here," must have been.

One may see in the windows of a confectioner in Fourth avenue, New York, "Pies Open All Night." A Bowery placard reads, "Home Made Dining Rooms, Family Oysters;" while a West Broadway restauranter sells "Home-Made Pies, Pastry and Oysters;" and still another

caterer on East Broadway retails "Fresh Salt Oysters and Lager Beer."

"Boots Polished Inside" is a frequent sign in New York, and on Atlantic avenue, Brooklyn, there is a "Stationary Library."

The latter is really a circulating library, and the word "Stationary" adorns one window and "Library" the other.

Philadelphia has a sign reading "Ho Made Pies!" and a barber shop in the same city bears this inscription on the window: "G. Washington Smith, Tonsorial Abattoir."

LOCATION OF STORE.

To the casual observer it would seem that the average hardware merchant does not pay enough attention to the location of his store. Old firms with an established trade can afford to ignore some of the rules governing the selection of a place; and yet when the history of a successful company is studied carefully it is generally found that the location of the store had much to do with building up the business. There may be some rare instances where a firm succeeded with a store located on some back, out-of-way street, but it is the exception rather than the rule. Anyone that can succeed in a bad location could do infinitely better in a store well located. Hence the hardware dealers that are staying in the business for the money there is in it are usually found occupying desirable locations.

It is not enough simply to open a store on a busy street where rents are high. After you have found the street and the block in which you wish to open a store, make a careful examination of the buildings in the block and select the one most adapted to the purposes of a hardware store. If such a building cannot be found on one side of the street, look for it on the other side, and if it cannot be found there choose a place that can be remodeled and fitted up to suit your business. Better select an open lot and erect a new building than get into a place where you can't do business. Enough difficulty is encountered in making a business pay without having its wheels clogged with unnecessary restraints. In other words, there is enough work to be done in managing a store in which everything is properly arranged and customers are numerous. The location of the store should be such that you will secure the maximum amount of transient business in addition to the maximum amount of regular trade. The two work together—dove-tail into each other, so to speak. Wherever regular customers are most frequently found, there will the transient buyers go in the largest numbers. Both are attracted by the same magnet.

As a rule, the same energy which a dealer spends in the wrong direction to his undoing

would enable him to succeed if it were directed properly. Where the store occupies an undesirable location and is in a building not adapted for the purpose, all the dealer's time is taken up in doing things that should take care of themselves—things that in a well located and well arranged store would need no attention. No amount of advertising and push will bring great crowds of customers into a store occupying an unfrequented part of the town, especially when the stock carried is incomplete. The interior of such a store is nearly always dingy, dust is allowed to accumulate on the goods and the clerks are generally lacking in courtesy and ability to wait upon customers properly. The most successful merchant in America would fail if he had all these obstacles to overcome. He could never be persuaded to undertake to do business with so many things in the way. Ole Bull himself, you know, could not play a violin that possessed no qualities of tone; but with a good instrument, even though it had but one string, he could make an audience laugh or weep at pleasure. No one recognizes the worth of a good instrument more than a master; and just so it is in selling hardware at retail—no one better understands the necessity of having a first-class store and having it located properly than the veteran merchant who has made a success in the business. All the dealer's effort should be spent in keeping his stocks complete in seasonable lines and in giving satisfaction to every one of his customers.—Stoves and Hardware Reporter.

PERSONAL MENTION.

Mr. S. F. McKinnon, president, and Mr. W. H. Evans, the local manager, of the Canada Paint Co., were guests at the banquet given to Sir. Wilfrid Laurier by the Board of Trade at the Pavilion, Toronto, on Wednesday evening.

Mr. George A. A. MacAgy, of Peck, Benny & Co., Montreal, was in Toronto for a couple of days this week on business. Mr. MacAgy, like nearly everyone else, reports business improving.

SHARP ADVANCE IN TURPENTINE.

A sharp advance in turpentine was decided upon by the wholesale dealers in Toronto yesterday (Friday) morning.

The price is now 50c. per gallon in Toronto and 52c. per gallon western points, freight allowed. This is an advance of three cents per gallon and is due to the scarcity of supplies.

THE DUTY ON BOLTS.

Hardware dealers and others who have a copy of the tariff issued from this office will kindly note that the duty on bolts is $\frac{3}{4}$ c. per lb. and 25 per cent., and not $\frac{3}{4}$ c. per lb. as stated in the report in question.

Three-quarters of a cent. per pound was the rate which appeared in the early copies of the tariff. The additional 25 per cent. was added afterwards, but this fact was un-

known to us when our issue of the tariff was revised.

In the later editions of the tariff the paragraph governing bolts reads as follows:

Iron or steel nuts, washers, rivets and bolts, with or without threads, and nut, bolt and hinge blanks and T and strap hinges of all kinds, n.e.s., three-quarters of one cent per pound and twenty-five per cent. ad valorem.

The haulage of coal from the Pittsburgh district to the lakes, according to The Pittsburgh Dispatch, requires 1,500 cars daily, or 9,000 cars all told, each making eight trips to the lakeside, to carry the 1,500,000 tons of coal estimated to be required.

BUSINESS WANTED.

WANTED AT ONCE FOR CASH A THOROUGH going Hardware Business in good town or village; must stand closest investigation; give full particulars. J. E. Pedlow, Vienna. (40)

BUSINESS CHANCE.

PARTNER WANTED IN A GROWING HARDWARE business in a live town in B. C.; one who can command a capital of \$5,000 and not afraid to rustle; correspondence solicited. Address, J. V., care HARDWARE AND METAL, Toronto (40)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary:

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

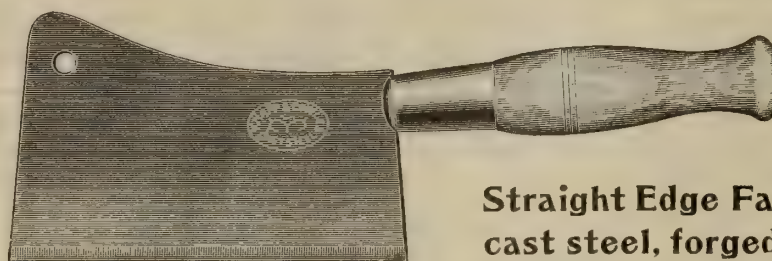
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SEND FOR

Catalogue..

of our Fall
line of

HARDWARE SPECIALTIES



NO. 2 CLEAVER.

Straight Edge Family Cleaver. Best cast steel, forged; with heavy steel ferrules. Perfectly balanced.

HISTORY OF TINFOIL.

TINFOIL was invented early in the fifties by John J. Crooke, a young man connected with the drug and chemical trade of New York. Crooke's inventive tendencies led him outside of his regular business, and he endeavored to perfect a method of coating iron bolts with copper, as a substitute for the copper bolts which he saw being used in ship building. In this he was unsuccessful; but it is stated that the experiments led him up to the combining of other metals, and he devised the plan of rolling tin upon lead sheets, producing a sort of weld between the two. Before this the only tinfoil known was pure tin beaten out into sheets as gold leaf is. A patent was obtained on the invention, and the production of the material was begun at Nos. 335-7 Stanton street, New York, some pure tinfoil being also made. A business card of this establishment has been preserved, which bears the inscription: "Foil Rolling Mill and Metallic Cap Works; tobaccoists' foil, plain or embossed, tin sheet-foil for druggists and bottlers, superior to imported article." The new foil was first used for the wrapping of fine-cut tobacco, which had previously been wrapped in paper only. Its advantages for this purpose were obvious, including its slightly appearance and its property of keeping the tobacco moist. The printing or stamping of names and designs upon the foil was a speedy outgrowth of its manufacture, which was stimulated after the imposition of internal revenue in war times by the printing of the internal revenue stamp directly upon the tobacco wrappers. A contract for this work was obtained by Mr. Crooke from the Government after many complaints of fraud and loss to the revenue through difficulties connected with the use of paper stamps.

Vast quantities of the foil are used for the packing of domestic Limburger cheese, the material being sent to the Northwestern States for that purpose by the carload. The wrapping of cigarettes in tinfoil is a

comparatively new development, the importance of which is manifest when the extent of cigarette manufacture is considered. About one-half of the output of the Crooke factory is rolled pure tin, as the proprietors always insist that only this shall be used when the foil wrapping is to be directly in contact with food. Large amounts are taken for the packing of yeast cakes and also for fancy cheese and other food products of the "delicatessen" order. A great demand for the pure tin comes from the manufacturers of plug tobacco, who use it for the wrapping of the separate plugs and also in sheets between layers of the tobacco. When a machine for packing tobacco was invented, which required tinfoil and paper to be fed into it altogether, a process was devised by which the foil was furnished already backed with thin paper and firmly adhering to it. The pure tin, by the way, is not used for the Limburger cheese wrappings, but the foil of tin and lead, as there is an inner wrapper of paper. Besides, it is probably thought that nothing could hurt Limburger anyway.

The embossing of the foil in various ornamental designs is a branch of the business which has gradually developed until now highly artistic results are obtained. In the fancy patterns, the silvery surface is diversified in bright and "dead" effects, by stars, plaids, flowers, bars, diagonals, lines, etc. Many samples are printed in colors, such as pink, blue and red, both the colors and the patterns being produced by putting the sheets of foil through a process of regular cylinder printing. Other specimens are lacquered with gold and embossed in various forms, presenting a beautiful appearance, and still others are brilliantly lacquered in colors. Confectioners, druggists, cigar manufacturers and cigar-box makers use quantities of these fancy designs, many of which are specially made for particular firms and serve as a sort of trade mark. The thickness, or rather

the thinness, of the foil runs from .0005 inch upward, the thinnest being the most expensive, as representing the most labor. It is rolled in sheets, which on the average are 50 inches long and 5½ inches wide (some also being rolled as wide as 12 inches), and is then cut into the lengths desired.

The makers of bottle caps are not classed with the tinfoil manufacturers, as these caps are not made of the regular foil, but are spun on a lathe from a mixture of lead and tin. Besides the John J. Crooke Co. there are now four tinfoil factories in this country, two in New York, one in Philadelphia and one in St. Louis. These four were started after the expiration of the original Crooke patent. The foil is also made in England, France and Germany, its production being especially large in the last-named country. Owing to the impossibility of competing with foreign labor in its manufacture, the United States has no export trade in the article, except a little to Havana, where it is used in the packing of cigars.

The output of tinfoil in this country amounts to millions of pounds a year, but there are no data accessible on which to base exact or even approximate figures. The market price of the most expensive embossed and lacquered foils runs as high as 75c. a pound, and from that it goes down so low that manufacturers do not care to quote the minimum rates. It is said that the average price has been reduced one-half within the last fifteen or twenty years, being lower now than ever before since the foil was invented. This was due to increased facilities of manufacture, increased production, and, especially, keen competition, particularly in the lower grades of the product.

There is constant improvement in the machinery and processes of tinfoil making and also in the article turned out. New uses for it are discovered yearly. Its chief merits as a wrapping are its pleasing appearance, its adaptability to ornamentation, its keeping in place as paper, and, above all, its preservation of the contents from drying.—Tin and Terne.

GIANT LOCOMOTIVES.

It is announced that three giant locomotives will soon be added to the equipment of a southern railroad. In drawing power they are promised to equal that of ten ordinary elevated railway engines, or four of the average passenger locomotives used in the United States. The six coupled driving wheels of each locomotive have a diameter of six feet, and the working steam pressure is placed at 200 pounds to the square inch. The cylinders are of the ordinary simple type, 21 inches in diameter, and with a stroke of 28 inches. This gives a tractive force or drawbar pull of 27,460 pounds, sufficient to haul a train load of 4,279 tons, equal to about the load of 85 laden freight cars, American type, at slow speed upon a level track. The fire box is 10 feet long with a width of 3½ feet, giving a total heating surface of 194 square feet, while the boiler is 5 feet 2 inches in diameter, with tubes giving a heating surface of 2,298 square feet. The tenders attached to the engine will have a capacity of 4,500 gallons of water, and the total weight of engine and tender will aggregate over 117 tons. The object of such huge engines is not to make speed on the level, but to maintain it on the grades. These three locomotives will be the largest of their kind in existence, if all that is reported concerning them is correct.

TIN ORE AND DIAMONDS.

An interesting occurrence of tin ore and diamonds, which is, we think, unique, is described in the recently issued report of the Department of Mines and Agriculture of New South Wales for 1896, according to an exchange. Gravel containing cassiterite in workable quantity, together with diamonds, was discovered last year at Boggy Camp, 15 miles west of Tingha, which has been some time a productive tin field. The pay streak at Boggy Camp, which is from 30 to 50 feet deep, averages from two to seven feet in thickness, the width of the lead not yet having been ascertained. One load of gravel yielded 515 stones of 184 carats aggregate weight, and 42 loads furnished 600 carats of diamonds, and tin-stone at the rate of 13 pounds per load. The pay streak is a quartz-pebble drift underlying a large hill of basalt. Mr. E. F. Pitman, the Government geologist, who examined the occurrence, considers that the basalt filled what was originally an oval-shaped depression. The gravel rests on granite, and granite can be traced entirely around the basalt. The diamonds are white and of good quality, and it is thought that when the gravel is drained the district will make a considerable production. About 60 men are employed there at present.

**THE
LARGEST
SHIPPERS
OF
VARNISHES
AND
PAINTING
MATERIAL
IN THE
DOMINION.**



**THE
CANADA
PAINT
COMPANY
LIMITED.**

**WORKS
MONTREAL
TORONTO
VICTORIA.**





Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern **STOVE POLISH**

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

DEAL THAT FAILED.

THE foundation for the mystery was developed in the department store in New York.

"Do you wish to have it charged?" said he.

"No, thank you," said the lady.

"Shall we send it to you?"

"It is so small that it is hardly worth while."

"It's no trouble, and you will avoid waiting while the package is being wrapped up."

"But I must wait for my change, anyway."

"Not at all; we can send it C.O.D."

"But it's only 63 cents."

"That makes no difference. It will be delivered this evening, sure."

"Very well," and the lady sauntered away, wondering why the clerk was so anxious to send so small a package to Brooklyn and put the establishment to the trouble of collecting 63 cents.

The mystery deepened at the home of the lady in Brooklyn.

"A package for Miss Blank," said the driver of the delivery waggon, and hurried to leave.

"He's forgotten to collect the 63 cents," cried the lady. "Stop him, Bridget!"

"Hey!" cried Bridget.

"That's all right," rejoined the driver, and disappeared around the corner.

The mystery was explained at the office of the father of the lady in New York.

"Are you Mr. Blank?" asked the dapper young man.

"Yes," said the father.

"The father of a large family of daughters in Brooklyn?"

"Yes."

"A C.O.D. package was sent to your house the other day. That suggests that perhaps you would like to open an account for your family at our store."

"Eh?"

"The advantage would be mutual. On our side we would have the trade of a large family of young ladies."

"So?"

"Large families of young ladies are in great demand as charge customers."

"Huh?"

"And so we would be very glad to open the account. On your side the advantage would be equally great. Our store is a long way from Brooklyn."

"H-m-m."

"And so your daughters would not be apt to buy so much as they would if they had an account in a Brooklyn store. Therefore you would save money."

"Yes?"

"Yes."

The father looked over his glasses at the dapper young man, and the dapper young man waved his hand and bowed. The father stretched out his legs, thrust his hands into his trousers pockets and began:

"So, then, you make it a business to search out large families of daughters?"

"Yes."

"And omit to collect money on C.O.D. packages so as to have a basis for starting an account?"

"Yes."

"The plan is ingenious. But it is not ingenious enough to succeed with the father of a large family of daughters. How old are you?"

"Twenty-seven."

"I am 57. If you are the father of a large family of daughters when you are 57 you will know more than you do now."

"Yes?"

"You will have learned that if one store is twice as far away as another a woman will feel herself obliged to buy twice as much as at the other to make up for the difference in distance."

"Yes?"

"You will have learned also that she will feel herself obliged to keep on buying as much as ever at the near store just because it is nearer than the other."

"Yes?"

"So that the net result would be that my daughters would buy three times as much as before if I opened an account with you."

"Yes?"

"Ordinary reasoning won't apply to women."

"Then you don't want to open the account?"

"No."

"Good day."

"Good day."—New York Sun.

THE SAFETY OF THE BAY OF FUNDY

The following, addressed to the editor, recently appeared in The St. John, N.B., Daily Telegraph:

"SIR,—We are much interested in the efforts you are making to establish the reputation of St. John, N.B., as a safe winter port.

"You have drawn special attention to the fact that during the winter months fogs are not so frequent as during the summer months. We are very much pleased to be able to make the statement that during the summer months, since the year 1878 to this time, in the year 1897, we have shipped from the head of the Bay of Fundy 1,516 cargoes of manufactured and unmanufactured plaster. During this period we know of only one vessel coming to us for cargo which has been lost in the Bay of Fundy, and only one outward bound vessel from us which met with any mishap on the way down the bay.

"With this summer record, and all you claim for the winter season, one can feel justified in thinking that the Bay of Fundy is safe at all seasons for experienced and careful navigators.

"We are especially interested in the establishment of regular steamship service between St. John and British ports, as we look for increased opportunity for business both in manufactured and unmanufactured goods on the other side of the Atlantic in the near future.

"We remain, dear sir,

"Yours respectfully,

"Albert Manufacturing Co.,

"C. J. OSMAN.

"Hillsborough, Sept. 30, 1897."

CHANGING THE WINDOWS.

It is remarkable how few hardware merchants realize the possibility presented to them of having their window well dressed and what great variety is possible in such dressing. Many hardwaremen would say that if they were grocers or dry goods merchants they would do wonders at window-dressing, but few think the possibility in their own line is as great.

What a window could be arranged of household tinware, and what a change if next week it was agricultural implements, then oils and paints, then cutlery and edge tools, not to mention the bicycle and its parts!

It is not a matter of incapability, but rather of indifference. If, therefore, the hardware merchant were to carefully consider the case a reformation in window-dressing would surely ensue.

Two merchants in a country town get in household goods or small agricultural goods of a new design, and both want to catch the eye of the buyer with them. They get them on Friday, so send an ad. to the country paper which comes out the following week. One stops there, putting his goods on the shelf. The other remembers Saturday is "farmers' day," and fills his window with the novelty in such an attractive way that it is sure to be noticed. It means some work to himself and his clerks early Saturday morning, but it also means business. The other man wonders how so few people ask about his advertisement.

Advertising in the newspaper is undoubtedly productive of good results, but a neatly dressed window is equally as important.

PRAISES THE CASH SYSTEM.

Mr. John Barclay, general merchant, Oakville, Ont., has just issued his fall circular. It is a bright advertisement, and shows evidence of being issued from an enterprising firm. In it there is a significant paragraph which reads: "Our experience of the cash system during the past three years has demonstrated it as the fairest and most advantageous to both buyer and seller. Let us take you a little into our confidence here. Selling for cash enables us to buy for cash at the lowest available prices. It secures having brought to notice any article offering at less than current prices, and obtains a liberal trade discount—advantages which we share with our customers."

Another paragraph reads: "A word about buying away from home. The gain is more imaginary than real. Loyalty to local trade would benefit both purchaser and seller."

Fall Sellers

**Root Baskets
Cinder Sifters
Step Ladders**

Made right—made on honor. Prices will please you—indeed they will

All kinds of woodenware and kitchen things

Clothes lines and clothes pins and washboards. Butter bowls and moulds and ladles.

Illustrated catalogue free.

CHAS. BOECKH & SONS - TORONTO

SEND US YOUR ORDERS FOR

**Window Glass
Plate Glass
Leaded Glass**

AND GLASS OF EVERY KIND

Toronto Plate Glass Importing Co.

HILL & RUTHERFORD

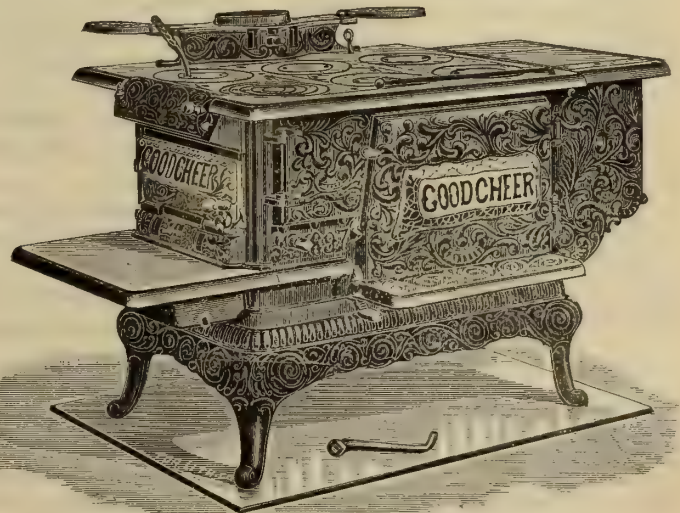
135 and 137
Victoria St.

TORONTO

**Good
Cheer
Ranges**

**LARGE
STEEL
OVENS**

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

WIGLE & CO., general merchants, Leamington, Ont., have assigned. A meeting of creditors will be held on the 11th inst.

Leonard Ervin, electrician, Halifax, N.S., has assigned.

J. P. Pothier, general merchant, Batiscan, Que., has assigned.

Adam & Co., general store, Dauphin, Man., have assigned.

A. A. Hunter, general merchant, Brome, Que., has compromised.

David Goldblatt, merchant, Tara, Ont., has assigned to Nathan Brenner.

An assignment has been demanded of Etienne Robert, contractor, Montreal.

Pierce & Misener, saw mill owners, Providence Bay, Ont., have assigned to James W. Cashman.

Henri Garon, general merchant, Causapscal, Que., has suspended, and assignment has been demanded.

O. Corbeille & Co., hardware and paint dealers, Montreal, have assigned, and their assets will be sold by tender.

Joseph Bourgeois, general merchant, St. Angele De Laval, Que., held a meeting of his creditors on the 4th inst.

T. Anthony's Sons, hardware and grocers, Berwick, N.S., are offering to compromise at 50c. on the dollar.

Auguste Leclerc, general merchant and lumber dealer, Riviere a La Martre, Que., has compromised at 65c. on the dollar.

PARTNERSHIPS FORMED AND DISSOLVED.

Archambault & Major, plasterers, Montreal, have dissolved.

Mann & Bent, general merchants, Amherst, N.S., have dissolved partnership.

Purvis & Murchie, St. John, N.B., saw mill owners, have dissolved partnership; E. H. Murchie continuing.

C. Perveley and Rogers, Robertson & Co., wholesale oil dealers, Montreal, have amalgamated with the Bushnell Co., Limited, of that city.

Leveille & Gagnon, general merchants, St. Laurent, Que., have dissolved partnership, and a partnership has been registered as Leveille & Cie.

M. S. Taylor & Co., general merchants, Mansonville, Que., have dissolved. A new partnership has been registered, composed of Edward C. Perkins, Marcus S. Taylor and Chas. W. Banfield.

SALES MADE AND PENDING.

Valentin St. Pierre, general merchant, Sayabec, Que., sold his assets on October 2.

John Handley, general merchant, Wolseley, Man., has sold out to Frank Hockin.

The stock of Gilbert McIntyre (estate of), general merchant, Wingham, Ont., was

advertised to be sold by auction on the 6th inst.

P. Murray, tinsmith, Welland, Ont., advertises his business for sale.

The American Harrow Co. have sold out their Windsor branch to Frost & Wood.

W. J. Cline, saw mill owner, Victoria, B.C., has sold out to Jas. Leigh & Sons.

The assets of E. W. Matthews & Co., bicycle dealer, Montreal, have been sold.

The stock in the general store of A. G. Lang (estate of), Hespeler, Ont., has been sold.

John F. Beverley, hardware merchant, St. John, N.B., has sold out to George F. Beverley.

A portion of the assets of the Thos. E. Howard Co., brass dealers, Montreal, have been sold.

The assets of Tremblay & Larouche, saw mill owners, Mille Vaches, Que., are to be sold on the 15th inst.

The assets of Alfred Duchene, general merchant, Roberval, Que., are advertised to be sold on the 12th inst.

CHANGES.

W. M. Butler & Co. have started a hardware business in Arnprior, Ont.

The Yankee Doodle Mining Co., of Toronto, Limited, has obtained a charter.

P. J. Magnant has commenced business as a general merchant in Plessisville, Que.

Thomas Moulton has commenced business as general merchant in Lansdowne, Ont.

Herbert Horton, general merchant, is closing up his business in Lansdowne, Ont.

F. S. Fowke, general merchant, Oshawa, Ont., has been succeeded by Isaac Goodheart.

Marie Deschambault has registered as proprietress of the hardware firm of A. Lacoste & Cie.

D. Hay, general merchant, Sandfield, Ont., has been succeeded by F. G. R. Bradbury.

Chisholm & Copeland, general store, Grenfell, N.W.T., succeed Love & Tryon, of that place.

Moise Deslongschamp and Chas. Huneau have registered proprietors of a plastering firm in Montreal.

Joseph Archambault and Fabien Brosseau have registered as proprietors of a plastering firm in Montreal.

The Weidmann Stave and Heading Mills Co. are moving their mills from Glen Rae to Southwold Station.

Manley & Averill, general merchants, Grand Forks, B.C., have been succeeded by Averill & Ballantyne.

The Bridgewater Electric Light Co., Limited, have been succeeded by the

Bridgewater Power Co., Limited, Bridgewater, N.S.

Chas. H. Roynor has registered as proprietor of the firm, Chas. H. Roynor & Co., contractors, Coteau du Lac, Que.

FIRES.

G. Gagnon, general store, Thurso, Que., has been burned out.

The sawmill of Perry & Black, Fergus, Ont., has been burned.

Mrs. Jane L. Stewart, general store, Prince Albert, N.W.T., had her stock damaged by fire.

The Independent Cordage Co. of Ontario, Limited, suffered loss by the Central Prison fire, but is insured.

Cowan, James & Co., wholesale carriage and builders' hardware dealers, London, Ont., have been damaged by fire.

The premises of R. C. McLeod, carriage builder, Summerside, P.E.I., have been damaged by fire; insured for \$2,000.

DEATHS.

John Hartigan, contractor, Montreal, is dead.

Pierre Claude, dealer in hides, Montreal, is dead.

Jas. G. Black, of the firm of J. & G. Black, general store, Thurso, Que., is dead.

Robert Crawford, of Crawford & Co., general merchants, Indian Head, N.W.T., is dead.

IRON PIPE FOR BRITISH COLONIES.

Prominent iron pipe manufacturers claim to be satisfied with the number of orders they have recently booked for export. The most satisfactory orders have been from the British colonies and South America. From this latter place some good contracts are said to be expected. Argentina and Brazil are making considerable improvements which will require a great deal of this material, and it is claimed that merchants in those countries are kept posted as to the price of the American product. From Venezuela and Colombia there is a constant demand for wrought iron pipe, but for small quantities. Mexico is probably the heaviest purchaser of iron pipe in the Spanish-American market, and it is seldom that a week passes without a shipment of several carloads.—N.Y. Journal of Commerce.

A PAYING FARM.

One of the best crops that has been reported this year was that of Mr. A. J. Cotton, of Treherne, who threshed from 475 acres over 12,350 bushels of No. 1 hard wheat. The yield on the whole field averaged 26 bushels to the acre. In addition to this Mr. Cotton succeeded in marketing quite a large bulk of the grain early in the season, and will realize from it about \$9,500. He will clear by the crop \$6,000 or \$7,000 for his year's work.—Free Press, Winnipeg.

THE "KRASEL"



Double Ash Sifter

P. R. KRASEL

Patentee and Manufacturer

2529 St. Catherine St.

MONTREAL

Write for prices and samples

Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high
11 inches wide
17 inches deep

2 SIZES WITH OVEN
2 SIZES WITHOUT OVEN

Manufactured by

Burrow, Stewart & Milne
HAMILTON

Agents for Manitoba and Western Territories, Merrick, Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and P. E. Island, W. L. Haldimand & Son, Montreal.

CREDIT.

"Kings may come and kings may go,
But Credit rules for ever."

CREDIT means confidence—trust. Our language acquired the word from the Latin word "credo," I believe.

Confidence worthily bestowed is like mercy. "It blesses him that gives and him that receives." It has built up our vast industries and snatched the world from the slough of chaos and placed it in the mountain of order. Remove it, and the world slides backward a thousand years and our mills would no longer send their busy humming through the peaceful valleys. Man would again assume his barbaric state and regard every neighbor his enemy. It is necessary to our progress and adds each year to our commercial importance, but, like many essential things, it is easily abused; too freely given, it acts like a boomerang on the man who has been courageous enough to entrust himself to its subtle blandishments, hoping to win favor, fame or fortune.

Bounds must be laid; limitations drawn. Knowledge must perforce go hand in hand with credit and see that she avoids snares and pitfalls.

Knowledge brings power, strength of mind, judgment; and credit gathers up the skein where knowledge leaves it and weaves it into a fabric of success.

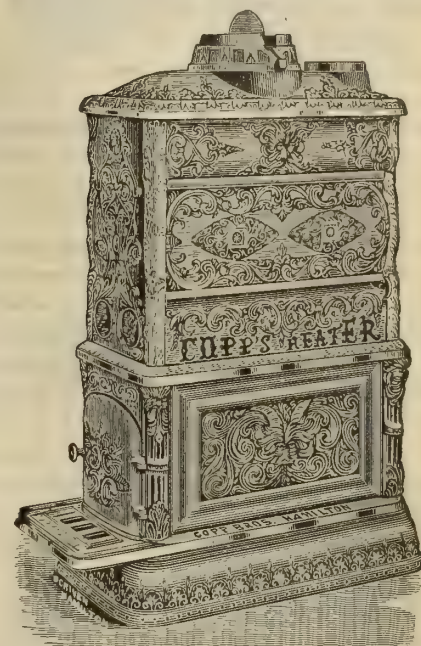
All men who are interested in granting credit find that knowledge is elusive and hard to secure. He who is able to lay at the credit man's door this knowledge is truly a benefactor.

Knowledge as applied to granting of credit must be absolute and not indefinite. Here-say opinion is valueless. Facts must be established.

How can this be done? Experience is a fact. It is truth, therefore cannot mislead. What one credit man has experienced in granting credit to a customer will indicate to any other man what his experience is likely to be. The experience of ten such men must therefore be regarded as an almost infallible guide to the future action of any man called upon to spend his goods and his labor to benefit one who has come to him for this priceless boon—credit. It would seem, therefore, that co-operation is necessary in order to reach this end. Each man must grant to all his fellows the benefit of his wisdom acquired through experience. This can be done through organization. It has been done to a large extent, and those who have been wise enough to take advantage of the chance to become identified with the movement will find no fault with the essential features of this article.

They have learned by experience that "knowledge brings power"—and they have woven their fabrics of success.—W. S. Lasse, in Lawyer and Creditman.

COPP'S WARRIOR HEATER



Our Copp Heater is a marvelous success, and has no equal.

It will render a larger increase of trade, as well as greater profit to the dealer, than any other stove made.

Its capacity is from 15 to 20 thousand cubic feet, and obtained with small consumption of fuel.

We shall be pleased to give further information upon enquiry.



Sectional Cut.

This cut shows the manner of conducting the combustion from fire-box to exit, after travelling over 14 feet. Direct draft dampers are provided.

The cold air passing in under the centre ring is forced in contact with the peculiarly shaped steel tubes, thereby becoming intensely heated.

One size burning 34 inch wood.

MANUFACTURED BY

THE COPP BROS. CO.

...Limited.

HAMILTON, ONT.

NEW MINING REGULATIONS.

THE Ontario Gazette contains the new regulations for mining divisions, which were approved of by the Lieutenant-Governor in Council September 15, 1897.

The regulations provide for the appointment of an inspector in every mining division, who shall be an officer of the Bureau of Mines, and shall be given power to inspect and examine mines, and shall give notice of any defect or danger to health or safety, and require same to be remedied. He shall be ex-officio a justice of the peace of his mining district and have power to settle all disputes regarding claims or other difficulties, unless such cases as are provided for, or where another tribunal is appointed by the Mines Act. He may appoint not more than four constables.

The director of the Bureau of Mines shall have the same power throughout the province as the inspector has in his mining division, and such other powers as shall be assigned him by regulation.

No person may act as inspector who is interested in any mine, and any inspector, director, or other officer becoming interested in any mine shall be liable to a fine of \$500 and to forfeit his position.

Any tract of country may be declared a mining division, and boundaries may at any time be changed by order-in-council, and where Crown lands are situated within a mining division they may be occupied as claims under miners' licenses.

Any person may explore for minerals on any Crown lands unless withdrawn from sale or exploration, as valuable for pine timber, or any such reason, and a license will be granted by the director of the Bureau of Mines for a fee of \$10, license to be in force one year and may be renewed upon application and for further fee of \$10. License may not be transferred without consent of director and upon payment of fee of \$2. This license must be shown and proved valid when recording claim or at any other time if required by inspector. It shall give power to work mine, but gives power to cut only such timber as shall be necessary for the working of the mine on his claim, nor shall licensee be deemed owner of any valuable water power within his claim.

Licensee discovering any deposit of ore shall have power to stake out a claim if not occupied or withdrawn from sale as Crown lands, and may have his license transferred to said claim by the inspector of the division upon payment of \$5.

The regulations give details as to staking of claims, which shall be square, 990 feet to the side, containing 22½ acres. Only one vein can be staked out by each licensee

unless over three miles distant, when license may be granted for each new claim for a fee of \$10 each.

An outline of the claim, together with description, position, etc., shall be sent by licensee to the inspector, and an affidavit as to validity of claim must be made. A licensee not fulfilling this regulation within 30 days shall forfeit his claim unless extension of time is granted by inspector. This 30-day rule does not affect that part of the province north of the French River, Lake Nipissing and the Mattawa River, and west from there, from Dec. 1 to April 1.

The inspector's book must remain open for inspection to any person upon payment of 20c., and all statements about claims and affidavits shall be filed or entered in the books of the inspector.

A roadway 15 feet broad shall be left between Crown lands and adjoining claims, and must not be obstructed in any way, unless as good a roadway be built by person obstructing. Nor shall damage be done to claim of one owner by another, nor shall any pickets, stakes or marks be disturbed or removed from any claim. Penalties are provided for breach of the above regulations.

Persons interfering with the inspector, or neglecting to furnish him with the means necessary for making an entry, shall be guilty of an offence against the Mines Act. Inspector shall have power to convict offenders, punishable under Part III. of the Mines Act, or any regulations belonging to it.

Provision is also made that upon an order-in-council being issued the Riot Act shall go in force within any mining division, and shall apply personally to all persons working in the division.

Part IV. of the Mines Act, 1897, is made applicable throughout to all mines or other such openings, and to all works for smelting, milling, etc., which are situated within the limits of a mining division.

HAD KEPT STORE FOR 30 YEARS.

He was, says an exchange, a man who never minced his words. He ran a wholesale store in one part of the town and a retail department in the other. In the retail department he employed a clerk who had decided and conscientious objections to tobacco and cigars. Still the store carried them and he sold them, but not without an inward protest. He thought it over and finally nailed a sign in a conspicuous position on a post in the centre of the store. The sign read :

NO SMOKING
ALLOWED HERE.

It hadn't been long up when the proprietor strolled in and began glancing around with a critical eye. After a time he noticed the new sign. Stepping closer, he folded his hands behind him and regarded its bold lettering attentively. Then his hands reached out, mechanically tore the new sign from its place and ripped it into a dozen pieces. "Boy," he said, with the utmost calmness, "I've kept store for thirty years without a sign like that and I guess we'll try it a little longer."

TIN PLATE TRADE.

The British Board of Trade figures for the month of August relating to the tin plate industry are far from satisfactory. The returns from owners of 55 tin plate works show that 10,730 persons were employed at the end of August, or 42 less than in July, and 2,005 less than at the end of August, 1896. So far as the depression is due to the loss of the American market the trade is not likely to be much further affected, remarks an exchange, the returns for the American fiscal year 1897 showing the total imports of tin and terne plates to have been only \$5,500,000, or about one-fifth of what they were six years ago.

**GLOBE FILES AND RASPS**

Manufactured from Superior Quality Cast Steel.

We warrant our goods equal to the best imported.

THE GLOBE FILE MFG. CO.

PORT HOPE, ONT.

Baylis Manufacturing Co.

16 to 30 Nazareth Street. MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

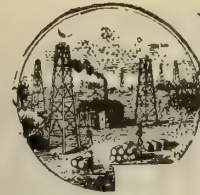
Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

VIRTUES OF GALVANIZED STEEL.

That metals float on the surface of water was proved not long ago in an interesting manner by Professor A. M. Meyer of the Stevens Institute of Technology, Hoboken. In making these experiments at first a ring of aluminum 50 millimetres in diameter was used made out of wire one millimetre thick, and it floated on the water; gradual additions to the weight of the ring being made, it sank deeper and deeper in a depression in the water, until, having reached a depth of five millimetres, it broke through the water surface, the total weight required to make the ring break through the surface being 2.6 grains. Further experiments showed that all metals with clean surfaces, from platinum of a density of 1.7, float on water. The fact was made evident by these experiments that metals sink when their surfaces are freed of air, and that after the film of air has recondensed on their surfaces they float—that is, in the first case, the metals are wetted, and in the second they are not, it being thus evident that the dry surface of the wire between the two opposite depressed surfaces of water could not exist if the water wetted the wire as it would wet a ring made of clean glass. At the same time Professor Meyer remarks, though the water does not wet the wire as it wets glass, yet the water is attracted by the wire so as to adhere to it with such force that it can take the curvature required to withstand the inward hydrostatic pressure on the two depressed water surfaces.—Stoves and Hardware Reporter.

A DIRECT BOAT.

The Coast Railway Co. is pushing matters along the south shore in real earnest. Between four and five hundred Italian laborers are expected to arrive from Boston the last of the week and will be added to the construction gang already at work. The right of way for the fourth ten-mile section of the road has been cleared and work on the fifth section was commenced Wednesday. It is expected the road will be in operation as far as East Pubnico early in October. The bridge at Hipson's Brook has been completed, the ballasting has been all completed to the brook and the track laid as far as the thirty-first mile. The company contemplate running a fast passenger and freight steamer between Shelburne and Halifax early next season, giving daily service. This boat will not make any stops, but will run direct. Another boat, probably the City of St. John, will be used as a local boat and will ply between Halifax and Shelburne, stopping at shore ports. It is expected that with the line in operation to Shelburne, and with fast steamship connection between Shelburne and Halifax, the company will control a large share of the traffic. The route will be well advertised, and we cannot see why it should not be successful.—Yarmouth News.



Van Tuyl & Fairbank

Petrolia, Ont.

Headquarters for ..
Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.

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BROOM AND CORDAGE
WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

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IRON FENCING

and all kinds of

Iron, Wire and Brass
Work

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Toronto Fence and
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(Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelties, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE"
TIRE UPSETTERS
WILL UPSET TIRES

Some machines sold as Upsetters will not.
Perhaps you make as much money on the
sale of a useless Upsetter as on a good
one, but your customer does not. He
don't want a machine because it is called
an Upsetter; he wants a machine to upset
tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

PLUMBING INSPECTION IN CANADA

MR. THOMAS N. THOMSON, of Scranton, Pa., recently made a business trip through Canada, and to The Plumbers' Trade Journal he has been giving his impressions of the plumbing trade in the Dominion. The Plumbers' Trade Journal says:

"Mr. Thomson called upon a few of the leading plumbers in Toronto and was very hospitably received. Trade has been quite dull in that city, but is improving rapidly now, and the plumbers are consequently feeling much encouraged. Some very large jobs are in course of erection, notably the City Hall and the Foresters' building. The progressive firm of Bennett & Wright is doing the plumbing, gas-fitting, heating and ventilation of this work, and it is a treat to look upon it. The excellent plumbing systems in these buildings are, no doubt, due to the energy and skill of Mr. Clapperton, foreman for Bennett & Wright, while the scientifically designed and beautifully constructed heating systems in these buildings are chiefly due to the scientific yet common sense of Joseph Wright himself.

"It is evident, said Mr. Thomson to us, that the standard of plumbing in Toronto is high, and it is also evident that justice is meted out to one and all by the plumbing inspectors of the city. The plumbing code of Toronto is claimed to be one of the best, if not the very best, of its kind on this hemisphere, if not in the whole world. One very important feature in the rules is that which compels a smoke test on all the finished work. Our Canadian brothers discarded the peppermint test long, long ago, and it is a dead dog in Canada now. Truly the Canadian plumber is no mean member of the craft, and our national association of master plumbers will never be disgraced by an affiliation between it and the Canadian association, is the opinion of Mr. Thomson."

A CHOICE OF VALVES.

A well-known engineer, who is also the practical and hard working superintendent of extensive iron works, recently gave the following sententious answer to an enquiry. Volumes could not say more: "In answer to your enquiry, my opinion as an engineer is that if you want to save coal, use

valves. If you want to save trouble, use ——— valves. In this part of the country coal is cheap and trouble is generally very expensive."

THE DEMAND FOR MODERN PLUMBING.

Flats and apartment houses are still being erected in rapidly increasing numbers, says a correspondent of a Buffalo, N.Y., paper, the demand for homes of this sort exceeding by far that for private houses. A notable fact, satisfactory to persons of limited means, is the number of comforts and modern improvements now to be found in flats renting at moderate figures, which formerly were confined strictly to the largest and most expensive apartment houses.

An instance of this is in the new open sanitary plumbing. This is now put into even the cheap flats, so that the occupants of these are better off in that respect than their neighbors whose older apartments rent for two or three times as much. A certain property owner has recently had a striking and rather expensive lesson on this subject. About four years ago he built several fine apartment houses, which were modern in every respect but the plumbing. At that time the new style had been little used except in private houses, and the owner in question was not able to foresee its rapid rise to general favor. His flats have always rented well until this year, when they were suddenly almost deserted by the tenants, who flocked over to some new buildings which, while no better in any other way, possessed the sanitary plumbing. In order to relet his apartments the owner has been obliged to refit them entirely at an outlay of about \$5,000. Many other owners of older houses have also felt the necessity of modernizing their property to suit the present ideas of prospective tenants.

In the new flats hot water is supplied continuously to all families in the house from a huge tank in the cellar. This does away with hot water boilers in each kitchen, and the tenants are not obliged to keep up coal fires for heating purposes. The necessity for heating the boilers having been removed, gas ranges are the next improvement in order, and these are now usually put in instead of those which burn coal.

PLUMBING CONTRACTS.

FIDDES & HOGARTH, Toronto, have a large number of contracts on hand, including plumbing and gas-fitting for three houses in Parry Sound and one in Napanee; plumbing contracts for the Headquarters Hotel; the Gwynne estate, Sherbourne street; hot water heating for two dwellings on Sherbourne street, one on Spencer avenue, one on George street and one on College street, Toronto; also contract for steam-heating at Beardmore's warehouses on Front street east, Toronto.

Guest & Co., Toronto, have a contract for building a hydraulic engine for a church organ for Mr. F. W. L. Shaw, organ builder, Toronto.

Tenders for the work on the new fire hall at Dundas, Ont., have been awarded as follows: L. Hickey, brick and stone work; Wm. Findlay, galvanized iron and slating; J. H. Anderson, carpenter work; W. R. Williams, plastering.

The John Ritchie Plumbing and Heating Co., Limited, Toronto, have the following contracts in hand: Alterations to the hot water heating of the residences of C. G. Marlatt, Oakville, and C. S. Blackwell, Toronto; and the Headquarters Saloon, Toronto; also alterations to the steam heating of the Central Canada Loan building, Toronto.

The Bennett & Wright Co., Limited, Toronto, have contracts for heating the Imperial Bank, a store for Parker Dye Works, Toronto, and a residence in Parkdale.

PLUMBING NOTES.

One Toronto plumbing firm reports it has four times as many men employed as ever before.

Building permits issued in Toronto for September aggregated \$59,195, an increase of \$7,620 over the total for the corresponding month of last year.

The Master Plumbers' Association of San Francisco has decided to procure centrally situated rooms to display plumbing goods and the latest specialties. This is a result of indifference on the part of local jobbers who did not keep a complete stock, thereby inconveniencing the plumbers. An invita-



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A
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ARMSTRONG MAN'F'G. CO.

AWARDED TO
ARMSTRONG
AND SONS
FOR BEST ADJUSTABLE
STEAM BOILER
FOR PIPE AND BOLTS
CLAIMING
SIMPLICITY, DURABILITY,
EASE OF USE,
AND ECONOMY

WATER GAS
AND
BRIDGEPORT, CONN.

CATALOGUES ON APPLICATION.

STEAM FITTERS
TOOLS

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

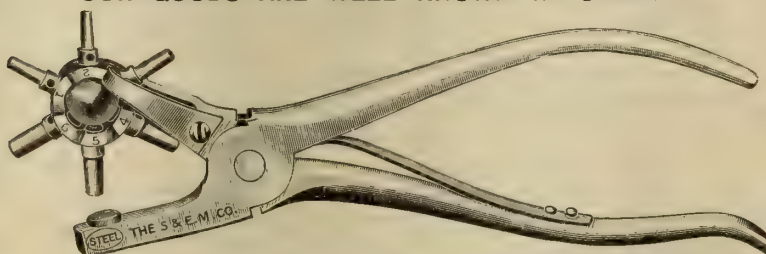
Hardware, Plumbers' and Bicycle Specialties.

OUR GOODS ARE WELL KNOWN IN CANADA.

NO 3

1897
CATALOGUE

Send for it.



NEW REVOLVING PUNCH.

Mention this paper,
Canadian HARDWARE
AND METAL.

THE SMITH & EGGE MFG. Co., Bridgeport, Conn., U. S. A.

tion has been sent to all makers to send samples and specialties.

Building permits have been issued to Mr. James McBean for alterations and additions to house at the north-west corner of McCaul and D'Arcy streets, Toronto, to cost \$1,000, and to C. D. Massey for a stable at 510 Jarvis street, and E. S. Lean for alterations to the front of 105 Baldwin street, Toronto.

FOOLED THE DETECTIVE.

A detective in a well-known retail store is engaged in the mental process of kicking himself whenever he thinks of a certain transaction which took place last week. At a time of day when the store was crowded

the detective, who was keeping a sharp look-out for evil-doers, was approached by a well-dressed, intelligent-looking man, who informed him that he was employed as detective in another store and had followed a shoplifter from his firm's store to the present place, where they would find her at the glove counter stealing gloves. "Let her alone," said the strange detective, "and when she loads up I will follow her home, and we then can make a big haul." Consent was given to this plan, and the shoplifter stole two or three hundred dollars' worth of goods unmolested. Then she went out, followed by the strange detective. That was the last ever seen of the pair, and the detective wonders how on earth he was duped so easily.—Philadelphia Record.

A LONG-FELT WANT.

Merchant bar iron has been made in Canada for about twenty years without any improvement in quality, but rather a falling off in that respect, which deterioration is no doubt due to the low prices ruling, causing a tendency on the part of the manufacturers to use inferior material and employ cheap methods. Superior qualities of iron have been placed on the market by Abbott & Co.'s Rolling Mills, as can be seen by advertisement, comprising grades equal to Lowmoor, Norway or Swedes, and the best English brands of iron which are still remembered by the trade.

There is a big falling off in the Ottawa lumber export trade. For the month of September there was a decrease of about \$100,000.



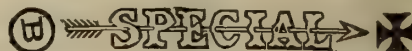
WADE & BUTCHER,
SHEFFIELD, ENGLAND.



OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

JAMES HUTTON & CO., Agents, - - Montreal

CURRENT MARKET QUOTATIONS

TORONTO, Oct. 8, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 16 1/4
Straits	0 16	0 16 1/4

Tin Plates.

Charcoal Plates—Bright.		
L.S., equal to Bradley.	Per box.	\$5 00
I.C., usual sizes		6 25
I.X., "		7 50
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	
I.X., "	4 25	
I.X.X., "	5 00	
I.X.X., "	5 75	
D.C., 12 1/2 x 17	3 00	
D.X., "	3 75	
D.X.X., "	5 75	

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Hessemer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base ..	3 15	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	7 50	
I.X., Orion	7 50	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs }	Per lb.	
" 14x60, " }		0 05 3/4 0 06
" 14x65, " }		

Tinned Sheets.

72x30 up to 24 gauge	0 06	0 06
26 "	0 06 1/2	
28 "	0 07 1/2	0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	1 80	
Band	1 75	
Hoop	2 00	
Sleigh Shoe Steel	4 00	4 25
Tire Steel	2 50	3 00
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10 1/2	0 11
Tank Plates, 1-5 and thicker ..	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1 1/2-inch	0 06 1/2	
2 "	0 07 1/2	
2 1/2 "	0 09 1/4	
3 "	0 11	

Steel Boiler Plate.

inch	2 45	
"	2 35	

3/4 inch and thicker

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 25	2 35
26 "	2 35	2 45
28 "	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 25	
Half polished	2 30	
All bright	2 90	

Iron Pipe.

Wrought, 1/4 to 3/8 inch, 17c; 1/2 inch, 2 1/4c; 3/4 inch, 2 7/8c; 1 inch, 3 1/2c; 1 1/4 inch, 4c; 1 1/2 inch, 4 1/4c; 2 inch, 5 1/4c; 2 1/2 inch, 6c; 3 inch, 6 1/2c; 4 inch, 7 1/2c; 5 inch, 8 1/2c; 6 inch, 9 1/2c; 8 inch, 11c; 10 inch, 12c; 12 inch, 13c; 14 inch, 14c; 16 inch, 15c; 18 inch, 16c; 20 inch, 17c; 24 inch, 18c; 30 inch, 19c; 36 inch, 20c; 42 inch, 21c; 48 inch, 22c; 54 inch, 23c; 60 inch, 24c; 72 inch, 25c; 84 inch, 26c; 96 inch, 27c; 108 inch, 28c; 120 inch, 29c; 144 inch, 30c; 168 inch, 31c; 192 inch, 32c; 216 inch, 33c; 240 inch, 34c; 264 inch, 35c; 288 inch, 36c; 312 inch, 37c; 336 inch, 38c; 360 inch, 39c; 384 inch, 40c; 408 inch, 41c; 432 inch, 42c; 456 inch, 43c; 480 inch, 44c; 504 inch, 45c; 528 inch, 46c; 552 inch, 47c; 576 inch, 48c; 600 inch, 49c; 624 inch, 50c; 648 inch, 51c; 672 inch, 52c; 696 inch, 53c; 720 inch, 54c; 744 inch, 55c; 768 inch, 56c; 792 inch, 57c; 816 inch, 58c; 840 inch, 59c; 864 inch, 60c; 888 inch, 61c; 912 inch, 62c; 936 inch, 63c; 960 inch, 64c; 984 inch, 65c; 1008 inch, 66c; 1032 inch, 67c; 1056 inch, 68c; 1080 inch, 69c; 1104 inch, 70c; 1128 inch, 71c; 1152 inch, 72c; 1176 inch, 73c; 1200 inch, 74c; 1224 inch, 75c; 1248 inch, 76c; 1272 inch, 77c; 1296 inch, 78c; 1320 inch, 79c; 1344 inch, 80c; 1368 inch, 81c; 1392 inch, 82c; 1416 inch, 83c; 1440 inch, 84c; 1464 inch, 85c; 1488 inch, 86c; 1512 inch, 87c; 1536 inch, 88c; 1560 inch, 89c; 1584 inch, 90c; 1608 inch, 91c; 1632 inch, 92c; 1656 inch, 93c; 1680 inch, 94c; 1704 inch, 95c; 1728 inch, 96c; 1752 inch, 97c; 1776 inch, 98c; 1800 inch, 99c; 1824 inch, 1 00; 1848 inch, 1 01; 1872 inch, 1 02; 1896 inch, 1 03; 1920 inch, 1 04; 1944 inch, 1 05; 1968 inch, 1 06; 1992 inch, 1 07; 2016 inch, 1 08; 2040 inch, 1 09; 2064 inch, 1 10; 2088 inch, 1 11; 2112 inch, 1 12; 2136 inch, 1 13; 2160 inch, 1 14; 2184 inch, 1 15; 2208 inch, 1 16; 2232 inch, 1 17; 2256 inch, 1 18; 2280 inch, 1 19; 2304 inch, 1 20; 2328 inch, 1 21; 2352 inch, 1 22; 2376 inch, 1 23; 2400 inch, 1 24; 2424 inch, 1 25; 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14928 inch, 6 46; 14952 inch, 6 47; 14976 inch, 6 48; 15000 inch, 6 49; 15024 inch, 6 50; 15048 inch, 6 51; 15072 inch, 6 52

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.	
Best thick white felt wadding, in ½ lb. bags.....	1 00	Annex, per doz.....	1 25 1 75	Canadian, dis. 25 per cent.		Nail	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	Mascott, ".....	1 35 1 85			Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	Erminie, ".....	1 12 1 20	Dies.		Tack.	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	Blind and Bed Staples.		Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		Magnetic, per doz.....	1 10 1 20
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	sizes, per lb.....	0 7½ 0 12	Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		Sledge.	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	Bolts.		Door Springs.		Canadian, per lb.....	0 07½ 0 08½
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	Carriage, dis., 70 p. c. off new list		Torrey's Rod, per doz..... (15 p. c.)	2 00	Ball Peen.	
Thin card wads, in boxes of 1,000 each, 8 gauge.....	0 25	Tire, dis., 70 and 5 per cent.		Coil, per doz.....	0 88 1 60	English and Can., per lb.....	0 22 0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—		Stove, dis., 70 per cent.		English per doz.....	2 00 4 00	HANDLES.	
11 and smaller gauge.....	0 60	Elevator, dis., 45 to 40 per cent				Axe, per doz., net,	50 2 00
9 and 10 gauges.....	0 70	Machine, dis., 70 p. c.				Store door, per doz.....	1 00 1
7 and 8 gauges.....	0 90	Coach Screws, dis. 80 p. c.				Chest, per doz. pairs.....	0 40 2 50
5 and 6 gauges.....	1 10	Boring Machines.				Chisel.	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		Complete, with augers, each.....	5 00 7 50			Firmer, per gross.....	3 00 4 50
11 and smaller gauge.....	1 15	Braces.				Socket Firmer, per gross.....	3 25 8 00
9 and 10 gauges.....	1 40	Barber's.....	6 00 7 75			Socket Framing, per gross.....	3 75 5 00
7 and 8 gauges.....	1 65	Barber's Ratchet.....	10 00 11 00			Fork.	
5 and 6 gauges.....	1 90	Farmers.....	2 00 2 75			C. & B., dis. 45 per cent. rev. list.	
Anvils.		Marl's Falls.....	15 50 29 00			Hoe.	
Per lb.....	0 10 0 12½	Brackets.				C. & B., dis. 45 per cent. rev. list.	
Anvil and Vice combined, each.....	4 50	Shelf.				Saw.	
Wilkinson & Co.'s Anvils, lb.....	0 09 0 09½	Japanned Canadian, per doz.	0 50 3 40			American, per doz.....	1 00 1 25
Wilkinson & Co.'s Vices, lb.....	0 09½ 0 10	pairs.....	0 85 3 20			Plane.	
Augers.		Berlin Bronze Canadian.....	0 85 3 20			American, per gross.....	3 15 3 75
Gilmour's, discount 65 p. c. off revised list.		Broilers.				Hammer and Hatchet.	
Hollow Stearn's, per dozen.....	13 00 20 00	Light, dis. 65 to 67½ per cent.				Canadian, 45 per cent.	
Adjustable Stearn's, each.....	5 50 6 50	Reversible, dis., 65 to 67½ per cent.				Cross-Cut Saw.	
Post-hole, Vaughan's, each.....	1 35 1 60	Vegetable, per doz., dis. 37½ percent.				Canadian, per pair.....	0 15 0 0
Excelsior, Jennings', discount 50 per cent.		Henis, No. 8,	6 00			HANGERS.	
Awls.		Henis, No. 9,	7 00			Door, 4 and 5 inch, per pair.....	0 40
Sewing, per gross.....	0 65 1 59	Queen City.....	7 50 10 00			Lanes, 50 to 50 and 5 per cent.	
Pegging,	0 65 1 25	Butchers' Cleavers.				HATCHETS.	
Brad,	0 85 1 60	From 8 to	4 23			Canadian, dis. 40 to 42½ per cent	
handed, per gross.....	3 60 3 60	Butts.				HINGES.	
Saddlers, per gross.....	0 45 1 60	Brass.				Blind, Parker's, dis. 60 and 10 to 65 per cent'	
Awl Hfts.		Wrought Brass, dis., 17½ p. c. revised list.				" Shepard's Noiseless, dis. 60 per cent.	
Patent Peg,	7 25 8 00	Cast Iron.				" Buffalo, dis. 60 to 70 p. c.	
" Sewing, per gross.....	7 25 8 00	Loose Pin, dis. 70 per cent.				Light T and strap, 70 and 10 p. c.	
Awl and Tool Sets.		Wrought Steel.				Heavy, per lb.....	0 03¾ 0 04¾
Millar's Falls, per doz.....	2 80 3 30	Fast Joint, dis. 70 and 10 to 70, 10 and 5 p. c.				Screw hook and hinge.....	3 15
AXES.		Loose Pins, dis. 70 and 10 to 70, 10 and 5 p. c.				6 to 12 in., per 100 lbs.....	2 35
Splitting Axes.....	5 25 5 50	Berlin Bronzed, dis. 70, 70 and 5 per cent.				14 in. up, per 100 lbs.....	Per doz. set.
Chopping Axes.....	7 25 7 50	Gen. Bronzed, per pair.....	0 40 0 65			Screw Eureka.....	1 13 1 80
Black Prince.....	7 25 7 50	Can Openers.				Gate, Clark's.....	1 50 2 20
Forest Clipper.....	8 50 9 00	Acme, per gross.....	9 00 10 00			" Shepard's, dis. 50 to 60 per cent.	Per doz. pai
Lance.....	8 50 9 00	Sardine Scissors, per doz.....	3 75 4 50			Spring.....	1 00 3 50
Mann's.....	8 00 8 25	Card.				" Shepard's Samson.....	1 20
Maple Leaf.....	9 50 10 00	Horse, per do.....	0 60 1 00			HOOKS.	
Hand Made.....	7 50 7 75	Carpet Stretchers.				Cast Iron.	
Climax.....	8 00 8 25	American, per doz.....	1 00 50			Bird Cage, per doz.....	0 50 1 10
Phantom.....	8 25 8 50	Bullards, per doz.....	6 50			Clothes Line, per doz.....	0 27 0 63
Axle Grease.		Carpet Sweepers.				Harness, per doz.....	0 72 0 88
Per gross.....	6 00 13 00	Bissell, per doz.....	22 50			Hat and Coat, per gross.....	1 00 3 00
Bath Tubs.		World,	21 75			Chandelier, per doz.....	0 50 1 00
Zinc, discount.....	3 90 4 0	Daisy,	24 00			Wrought Iron.	
Copper, discount, 40 and 10 p. c. off revised list.		Star.....	13 00			Wrought Hooks and Staples, Can., dis. 47½ per cent.	
Steel clad, 20 per cent. discount off revised list.		Crown Jewel, per doz.....	29 00			Wire.	
Boxing extra		Grand Rapids,	24 00 33 00			Hat and coat, dis. 60 to 60 and 10 p. c.	
Bells.		Cartridges.				Belt, per 1,000.....	0 60 2 70
Hand.		(See Ammunition.)				crew, bright, Eng., dis. 60 per cent.	
Brass, 60 per cent.		Castors.				HORSE NAILS.	
Nickel, 55 per cent.		Bed new list, dis. 55 to 57½ per cent.				Canadian, dis. 50 p. c.	
Door.		Plate, dis. 52½ to 57½ per cent.				Canada Horse Nail Co.'s "C" brand f.o.b. Montreal, 50 p. c.	
Gon Sargant's.....	5 50 8	Cattle Leaders.				HORSE SHOES.	
" Peterboro', discount 50 per cent.		Nos. 31 and 32, per gross.....	8 50 9 50			F.o.b. Toronto and Hamilton	3 35
Cow.		Cement.				Steel.....	4 85 5
American make, discount 66½ per cent.		Canadian, Portland.....	2 50			F.o.b. Montreal 10c. less, and London more than above.	
Canadian, discount 45 and 50 per cent.		English.....	2 50			ICE PICKS.	
Farm.		Belgium.....	2 35			Star per doz.....	3 00 3 25
American, each.....	1 25 3 00	Canadian hydraulic.....	1 10			KETTLES.	
House.		Figures are for barrel lots.				Brass spun, 7½ p. c. dis. off new list.	
American, per lb.....	0 35 0 40	Chalk.				Copper, per lb.....	0 30 35
Bellows.		Carpenters' Colored, per gross.....	0 45 0 75			American, 60 and 10 to 65 and 5 p. c.	
Hand, per doz.....	3 35 4 75	White lump, per cwt.....	0 60 0 65			KEYS.	
Moulders, per doz.....	7 50 10 00	Red.....	0 05 0 06			Lock, Can., dis. 50 p. c.	
Blacksmiths', discount 60 per cent.		Crayon, per gross.....	0 14 0 18			Cabnet, trunk, and padlock.	
Belting.		Chisels.				Am. per gross.....	1 60
Extra, 40 and 10 per cent.		Socket, Framing and Firmer.				KNOBES.	
No. 1, leather, discount 60 per cent.		American, dis. 75 to 77½ per cent.				Door, japanned and N.P., pe	
Standard, 55 per cent.		Canadian, dis. 50 and 10 per cent.				doz.....	0 65 3 00
Agricultural, 65 and 5 p. c.		Tanged firmer, per doz.....	0 85 4 00			Bronze, Berlin, per doz.....	2 75 3 25
Bench Stops.		Churns.				Bronze Gem,	6 00 9 00
Per doz.....	5 00 6 00	Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.				Sava,	8 75 10 00
Bits.		Steel, net.....	3 00			Shutter, porcelain, F. & L.	
Auger.		Clamps.				crew, per gross.....	1 30 4 00
Gilmour's, discount 65 and 5 per cent.		Judds', dis. 20 per cent.				GLUE POTS.	
Excelsior, discount 60 per cent.		stearn's, per doz.....	3 00 10 00			Tinned, each.....	0 30
Rockford Common, 65 to 65 and 5 per cent.		Clips.				Enamelled each.....	0 55
" Perfection, 50 and 10 per cent.		Axle dis. 65 per cent.				GRINDSTONE FIXTURES	
Jennings' Gen., net list to 5 p. c. discount.		Coffee Mills.				P. S. & W., per doz.....	3 60 4 00
Car.		Box.....	3 60 13 00				
Gilmour's, 47½ to 50 per cent.		Side.....	3 60 4 00				
Expansive.		Enterprise, No. 0.....	1 35				
Clark's, per cent.		No. 2.....	70				
Excelsior, 10 per cent.		Compasses, Dividers, Etc.					
Gimlet.		American, dis. 62½ to 65 pe cent					
Clark's, per doz.....	0 65 0 90						
Diamond, Shell, per doz.....	1 00 1 50						
Nail and Spike per gross.....	2 25 5 20						

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets, etc. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.

Russell & Erwin, per doz. 1 75 7 50

Cabinet.

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00

Scandinavian, " 1 00 2 40

Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.

Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25

No Name Metal, " 18

Mystic Metal, " 08

F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50

Carpenters', hickory, per doz. 1 25 3 75

Lignum Vitae, per doz. 3 85 5 00

Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00

American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.

German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 7½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85

f.o.b., Toronto, Montreal, Hamilton, London.

Cut Nails (Steel). Add 10c. to the prices in

list for iron nails.

Wire Nails, basis—\$1.15 Toronto. Terms, 4

months or 3 off and 30 days; delivered in

lots of 10 kegs or more.

Brads and finishing nails, special sizes, 80

p.c. from new list.

NAIL PULLERS.

German and American, 1 85 50

NAIL SETS.

Square, round, and octagon,

per gross 3 38 4 00

Diamond 12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.

OIL.

Canada refined oil (Toronto), 0 16 0 16½

Carbon safety, " 0 18 0 00

Canada w. w. " 0 18 0 00

American w. w. " 0 00 0 21

Pratt's Astrol, " 0 00 0 22

OILERS.

McClary's galvan. iron oil can,

with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

Carpenter, " 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis

Mrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to

2 in. R. & L. \$5 00

No. 38 Hand Machine, range 1½

to 4. 100 00

No. 56 Hand Machine, range 2½

PLANES.

Wood, bench, Canadian dis. 55 per cent.,

American dis. 55.

Wood, fancy Canadian or American, 37½

to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 27½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½

40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

S. R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle, " 0 22 0 33

Screw, " 0 27 1 00

Awning, " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors', " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03¼ 0 03¼

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis

60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc.,

(Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc.,

(Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclu-

sive, 61 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier,

65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 1½ and 5 p.c. dis.

cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian, dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 5½ 00 7½

¾ in. 6 00 7½

¾ and 5-16 in. 6½ 00 8½

Cotton 15 17

Russia Deep Sea 00 13

Jute 6¾ 7½

RULES.

Boxwood, dis. 80 and 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

N.P., per set. 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.

B. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 60 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes,

per dozen 0 40 0 70

"Empire," McMillan & Haynes,

per ft. 0 00 0 70

Hand, Diston's, dis. 12½ to 15 p.c.

S. & D., 40 to 40 and 10 per cent.

Crosscut, Diston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan &

Haynes, per doz. 0 70 7 50

Whiting, " 4 47 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ &

10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis.

7½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

" iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 60 p.c.

Bristol, japanned, 80 p.c.

N.P., dis. 70 p.c.

Clauss, full nickel, 60 p.c.

" japanned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

tinned, " 1 25 1 35

Tin rim, per doz. 2 30 2 45

black, " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme, " 3 00 5 00

Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

Per lb. 0 24 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES

MONTREAL ROOFING COMPANY

MANUFACTURERS OF



Improved Steam Condensing Exhaust Pipe Heads . . .

For attaching to Outlet of Pipe above roof . . .

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In the Hardware Trade and How Avoided.

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If so, say so in **HARDWARE AND METAL**. It reaches the most likely buyers. Two cents a word each insertion.

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Manufacturers of

CHARCOAL PIG IRON

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BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

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Managing Director and Treasurer

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Hardware and Metal, Toronto

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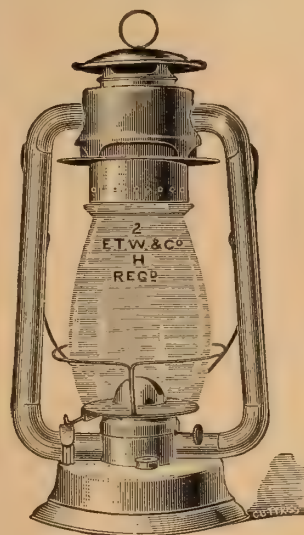
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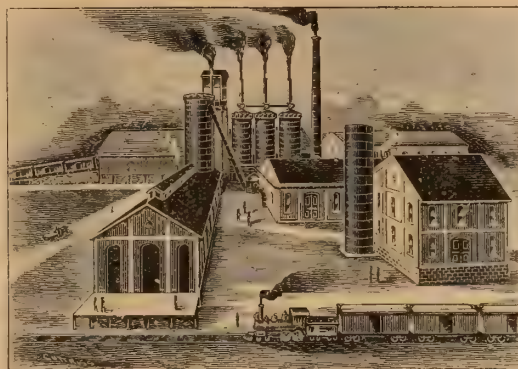
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..TINWARE



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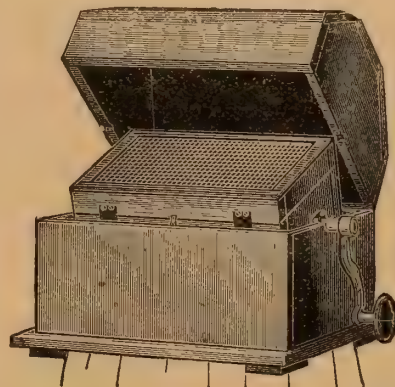


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HAMILTON, Canada.

Manufacturers of

HIGH GRADE PIG IRON.



Now is the time

to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.

Manufactured by . . .

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Black Diamond File Works

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Twelve

Medals

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Awarded

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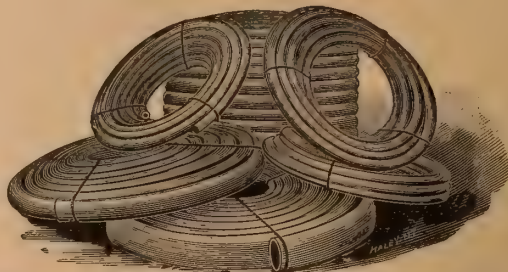
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OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

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PAINTS, OILS or VARNISHES?

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Prompt shipment guaranteed.

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Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, OCTOBER 16, 1897

No. 42



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.
MONTREAL OFFICE—

Caverhill, Learmont & Co.
General Dominion Agents.

Owners and Sole Manufacturers,

266 and 267 West St., New York

IT'S WORKABLE...

Will stand double seaming, or any other test to which Iron can reasonably be put, every time.

IT'S FLAT...

You don't say "flat as a pancake" now, but "flat as 'QUEEN'S HEAD' Iron."

IT'S BRIGHT...

No second-class Galvanizing—you know it at once by its beautiful appearance, and it WEARS.

IT'S LIGHT...

More sheets to the ton than any competing brand. It is cheaper by the sheet than any other good make.



CANADA.

These are a few of the reasons why it is used more than all other makes put together.

Canada's Largest Radiator Manufacturers.

Cold Facts Choke Their Oratory—

Competitors who resort to misrepresentation when telling you about the "Safford" are often found out. It would make a horse laugh to hear some yarns repeated. The "Safford" needs no defenders. They are absolutely perfect in construction and low in price.

"Safford"

ARE THE ONLY PERFECT
Radiators

They are more expensive to make.

They are, however, well made,
and fully guaranteed—without a fault.

Leading All Others by Miles.

Made only by...

THE

TORONTO RADIATOR MFG. CO Limited
Toronto, Ont.



To the Trade...

WOOD
and
FELT

WEATHER STRIP

Write for Price List and Discount Sheet.

RICE LEWIS & SON (LIMITED)

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Anything in....

Copper

THE range of our product is from the smallest article possible to make to the largest work ever used or required.

COPPER WORK

made to any desired specification or design.



We have always on hand a large stock of

**Sheet Copper and
Copper Tubing**

CORRESPONDENCE SOLICITED

THE BOOTH COPPER CO.
Limited.

TORONTO

Keep a Little Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price.

**NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP**

Are you ready for the Fall
Trade in this line ?

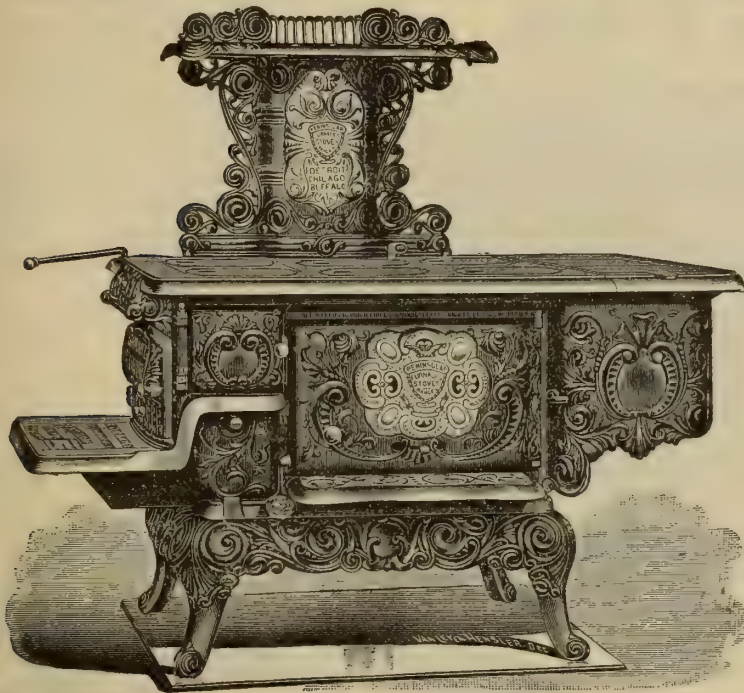


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NEW STOVES



THE GRANITE RANGE.

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A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new goods with same dress as the Granite Range, which is acknowledged to be the prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO. - - PRESTON, ONT.

Clearing Sale . .

♦♦♦
**IMPORTANT
 ANNOUNCEMENT
 TO THE
 HARDWARE
 TRADE**
 ♦♦♦

Owing to a change of business there will be a **Great Clearing Sale of the Bowman, Kennedy & Co., Hardware Stock**, amounting to seventy thousand dollars.

From Monday the 11th to the 30th of October this stock will be offered without reserve.

This will be a **great opportunity** to purchase your fall stock of hardware. The above stock has been **bought for cash when values were the lowest**, and as goods are now advancing there could not be a better time for buying.

A visit to the warehouse will be to the buyer's interest. The stock consists of **General Hardware, Sporting Goods, Glass, Paints, Oils, Varnishes, Silverware, etc.**, all of which will be cleared out. **This will be the most important clearing sale ever held in the Province**, as the stock is new and well assorted. Orders filled as received and accepted subject to stock not being sold. Yours truly,

Bowman, Kennedy & Co., London, Ont.

ALWAYS COLD.

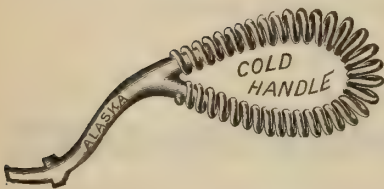
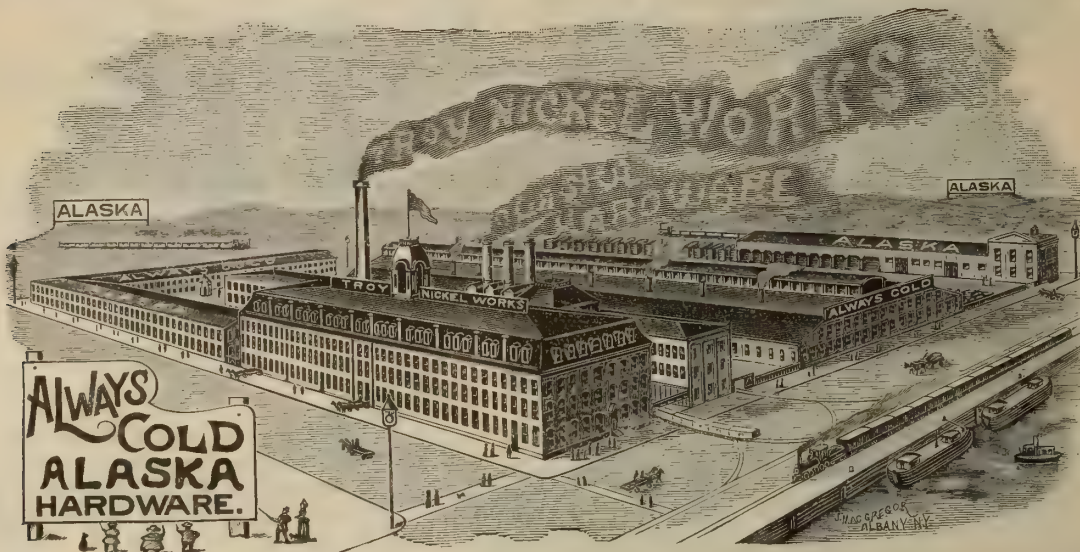
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc., Etc.



To Canadian Trade

If your Jobbers don't carry this line send to us for prices. We will land the goods at your door. WRITE US ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

Note the length
of fire travel!

OUR

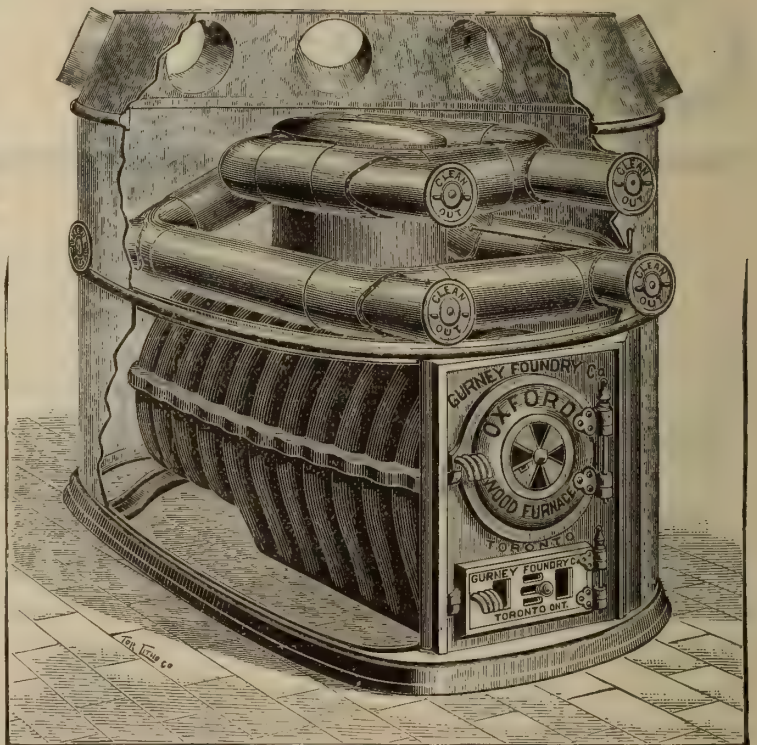
OXFORD FURNACES

For Coal or Wood

are made in 6 styles—15 sizes. Steel or cast iron fire box dome. A range of capacity from 10,000 to 80,000 cubic feet.

These furnaces are always reliable, quickly regulated, easily operated, and very economical in the use of fuel. You can't find better selling value.

Write us for Catalogue and Prices.



Wood Furnace, with Double Pipe Steel Cylinder Radiator.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



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Major A. G. Campbell, General Subscription Agent.

BRASS AND THE MINIMUM TARIFF.

ONE instance of the benefit the preferential tariff will be to Great Britain when the one-fourth reduction on the regular duties goes into force was drawn to the attention of **HARDWARE AND METAL** a few days ago.

There are certain lines of brass goods which importers in Canada have heretofore been in the habit of importing from Germany, but, anticipating that the minimum tariff will continue in operation, these importers are now placing their orders with manufacturers in Great Britain, the goods to be delivered after the one-fourth preferential rate goes into force on July 31 next.

Were it not for the preferential rate the business would still go to Germany.

Of course our imports from Germany of dutiable brass and manufactures of are small compared even to those from Great Britain, while compared with those from the United States they are practically nowhere. Our imports of brass and manufactures of in 1896 from the three countries named were: Germany, \$9,792; Great Britain, \$42,061; United States, \$263,436.

Of free brass goods and manufactures of, we in 1896 took nothing from Germany, the

United States supplying nearly everything, Great Britain's contribution being only \$36,498 worth against \$127,323 worth from the United States.

The most interesting thing to watch under the preferential tariff will not be how German brass goods are supplanted by British, but how British goods will supplant those from the United States.

GEAR CASES AND CHAINLESS WHEELS.

IT may be that the chainless wheel will be immensely popular next season, but it is likely the use of the gear case will preserve the popularity of the chain.

There are good and sufficient reasons why all wheels for next year should be so designed that gear cases can be furnished when specified.

The much-mooted question of power transmission will resolve itself in the minds of many riders, whose analysis of the subject does not comprehend its strictly mechanical phase, into a study of internal gearing solely as a mitigation of the nuisance of mud-clogged and stiffened chains, a reform which gear cases alone would accomplish without sacrificing the many points of superiority which the chain possesses over a combination of bevel gears. Unless some unexpected discoveries are made which will greatly improve the best of present chainless patterns, a chain-driven machine will be preferred as possessing fewer disadvantages, especially as the addition of a gear case will be an effectual remedy for one of the principal drawbacks which bevel gears are intended to overcome.

CANADA AND GREAT BRITAIN.

EXPORTS from Great Britain during September decreased $7\frac{1}{2}$ per cent. compared with the same month a year ago, and, according to the cable, the British press maintain that it is mainly due to the Dingley bill, which, in the words of *The Times*, "is to close the American markets very largely to British goods."

It is significant at this time for Canada that the Dingley law should have gone into operation and that the diminished exports from Great Britain should be ascribed to be, in the main, due to that law.

With John Bull business is business. Sympathy as a factor in trade counts for little. It does not matter to whom he sells goods so long as he is paid for them, or from whom he buys as long as he can buy right. But there is, nevertheless, a point where sympathy can be aroused.

Canada awoke it when she put the preferential tariff into operation, and the United States with its Dingley tariff stirred it into greater activity. To-day sympathy is a factor in Great Britain's trade with her colonial possessions.

Of all the goods the United States last year exported Great Britain took no less than \$405,741,339 worth, or about 46 per cent. of the whole, while the British Empire took \$511,326,162 worth, or near 57 per cent. of the total exports to all countries.

There is no question, then, that Great Britain alone, not taking the Empire into account at all, is incomparably the best customer the United States possesses to-day, a customer which, if it were to impose the

same disabilities on United States goods as the latter has upon British goods, would cause Uncle Sam much concern.

A merchant or a manufacturer is never discourteous to his best customer, particularly if he takes 50 per cent. of his output. He is always courteous and solicitous for the maintenance of his trade.

Nations, who are aggregations of individuals, should do the same; but they do not always do so. The United States does not. Her best customer is the special object of her spleen. Her tariffs are designedly shaped to injure Great Britain and her chief colony, the Dominion of Canada, while treaties and awards affecting Canada and the Mother Land are ignored with consistent impunity by Congress.

Canada long ago recognized the antipathy of the United States towards Great Britain and British institutions, because she was the first to feel it. And now Great Britain, unwilling as she is to do so, is feeling it too.

Canada always was, and probably always will be, willing to extend her trade relationship with the United States on equable grounds; but there is yet no indication that the day when such conditions shall exist is even near the dawning. The price at which we can get it is discrimination against Great Britain, and this is a price we never were nor probably never will be willing to pay. In fact, at present we are in less mood to do so than we were at any time in our history.

It is to be hoped the present Government, like its predecessor, will be just as quick to spurn closer trade relations under such conditions. Hon. Mr. Fielding, who is in Great Britain, stated on Friday last, according to the cable, that Canada's "willingness to meet reciprocity approaches from Washington would exclude discrimination against England, which was quite impossible." It is evident, therefore, that the present Government is actuated by the same spirit as its predecessor.

Canada's position in the British market was never as favorable as it is to-day, and her prestige was never as great. Within a few months she has developed, in the eye of Great Britain, from a colonial to a national status. More interest is being taken in her, more pride is felt in her, and more aggressive means are being taken by the manufacturers and merchants of the Motherland to do

business with her. As a result of this, together with the inducements for investment which our wonderful natural resources hold out, will naturally follow an increased flow of British capital in the country.

It is to be hoped that the Government of the Dominion will employ itself with increased vigor to the task of increasing our trade with the Old Country, while at the same time carefully avoiding all semblance of double dealing, trickery, or any other improper thing which has become so characteristic of politicians on this side of the Atlantic. Even a semblance of these things might be dangerous, particularly just now.

POSITION OF LEAD PRODUCTS.

WHILE the makers' conference did not result in any advance in the price of lead products, it is their claim that the condition of affairs fully justified a rise in shot, lead pipe and white lead. They assert this because the margin they are working on at current prices, allowing for the increased price of raw material, and the cost of manufacture, is too narrow.

While they agreed that this was the case, makers who had procured supplies previous to the advance were opposed to a rise in the price of finished material, as they preferred to realize on the stocks they had in hand.

As they have the whip hand, having plenty of supplies to carry them along until after the close of navigation, a further advance in price is unlikely for some time.

COUNTRY FENCE ADVERTISING.

Circumstances alter cases, but it is an extremely rare combination of circumstances that makes advertising on country fences pay. The idea of advertising is to tell something of interest, to tell a business story which will attract attention to your goods and their prices.

A sentence, "Go to Smith's for hardware," tells nothing to the average man, though the letters be a yard deep and painted in yellow ochre and turkey red.

A sentence in your local that you have just received a supply of ash-sifters and preserving pots, with their prices, or a neat display of such in your window, with a price tag, will do more business in an afternoon than \$10 worth of fence painting.

THE PRICE OF WIRE NAILS.

HARDWARE AND METAL is this week able to furnish further details regarding the price of wire nails, as decided upon by the manufacturers at the conference held last week.

As stated then, the price decided upon was \$1.75 in carload lots, and \$1.85 in less than carload lots, Montreal.

Since then the details have been further worked out, and manufacturers and jobbers in Toronto, Hamilton, Brantford and London are now all quoting prices based on the Montreal figures, just as they were a short time ago, basing their quotations on the Pittsburg figures.

That is to say, when a price is quoted at any point outside those named, the price will be based upon the Montreal figures, namely, \$1.75 if for carloads and \$1.85 if for less quantities, the freight from Montreal to the point of delivery being added.

Under this arrangement it does not matter whether he places his order with a jobber in Toronto, Montreal, London, or Hamilton, the price the retailer will pay will be the same.

The flat price retailers in Montreal, Toronto, Hamilton and London will pay to their local jobbers for less than carload lots will be as follows: Montreal, \$1.85; Toronto, \$1.95; Hamilton, \$1.95; London, \$2. Carload lots will be ten cents per keg less.

The arrangement does not affect the Maritime Provinces.

There is no association on wire nails, as noted some months ago, the above prices being the outcome of a conference of the various manufacturers. It might be noted that even the manufacturers who were non-members of the late association are parties to the present arrangement.

Taking the local price in Toronto to-day for carload lots at \$1.95, it is something like 25c. per keg cheaper than wire nails in the same quantities could be laid down in Pittsburg, and as prices are strong and the market active in the United States, the feeling as to prices in Canada is rather upward than downward. It will be well, therefore, for the trade to keep their stocks on the right side.

THE TRADE SITUATION.

THE trade situation in Canada continues to bear the mark of a healthy improvement.

Nearly every wholesaler and manufacturer whom **HARDWARE AND METAL** has questioned on the subject, has experienced, during the past four or five months, a steady increase in trade compared with the same period last year.

It is true prices are not yet on the whole satisfactory, but with the improved demand will naturally come better prices. But those who may be looking for the prices of long ago are likely to be disappointed.

The perfection of machinery and the rapidity with which goods are turned out will naturally have a minimizing influence upon prices, but that does not prevent money being made. It chiefly means that economical conditions are changed. Manufacturers and merchants who fail to conform to these conditions will not be able to do business under comfortable circumstances.

Another sign of the times is the manner of buying of the farmers. For some years, as every merchant knows, farmers, as a

rule, have been the most conservative of buyers. Not only have they bought in a hand-to-mouth fashion, but they have commonly bought the cheapest goods, and could not be induced to buy anything better, the plea being hard times.

Within the last month or two this has all been changing. Merchants doing business in Toronto in localities where farmers congregate state that the agriculturists are not only buying larger quantities but they are buying goods of better quality.

There is every reason why they should: They are getting at least fair prices for their wheat, hogs, cattle, poultry, dairy produce, hay, etc. And while they are getting, compared with a year ago, more for that which they have to sell, there has been no increase in that which they have to buy.

Aside from the improved conditions being enjoyed by the wholesaler and the retailer, there are the signs of the times as seen in the clearing house returns. These have for some time been steadily increasing.

Taking the aggregate clearing house returns of last week for the three cities of

Montreal, Toronto and Winnipeg, the increase, compared with the same week in 1896, was over 40 per cent., a most gratifying and reassuring result.

Then there are the railway returns. They are increasing week by week. And railway earnings only increase when there is the merchandise to induce them to do so.

The outlook for the lumbering industry, as far as trade with the United States is concerned, is not good, but it is bright as far as that with Great Britain is concerned. If our trade in lumber is decreasing with the United States it must not be forgotten that it is increasing with Great Britain. During the summer enormous quantities have been shipped across the Atlantic from the St. Lawrence and Maritime Province ports.

Now that good times are upon us business men can prolong their stay by consistently and persistently following good business methods, and by a judicious exercise of push and enterprise.

Because good times are upon us it would be foolishness to become careless in the scrutiny of accounts or injudicious in buying or in any other business particular.

The Only Way

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

THOUGHTS ON COLLECTIONS.

THE matter of collections, writes L. M. N., in *Metal Worker*, engrosses not a little of the merchant's time and attention. It is an unwise policy to allow customers their own time in making payment. Even where the capital is ample and the merchant may not need to collect bills promptly, not needing the money, it is best to have a system of collecting accounts when due, and of adhering to that system. Some may argue that it pays to allow debtors the privilege of paying when they get ready, where the capital of the business will permit. They may claim that it makes the house popular with the buying public, and is a means of securing and retaining business; and that people do not like to be asked for money, and will patronize the house where they can have their own terms.

Now, while we may admit that there is some truth in this, and that it is a delicate matter to collect from some thin-skinned people (in regard to their money obligations), and that in some cases offence may be given, yet it is not a sound principle of business to allow accounts to drag along after the time when they should be paid has arrived.

In the sale of a bill of goods there must be a contract between the buyer and seller. This contract may not be in writing or it may not be definitely expressed in words, yet it exists. The seller delivers the goods and the buyer agrees to pay for them at a future specified time. When this time arrives the buyer is expected to fulfil his part of the agreement. If he does not, then as a matter of business the seller should notify him and ask for payment. Now, there are some people who decidedly object to be reminded that they are owing a bill. Unless they are unusually good customers, who pay good prices and make voluntary settlements in a reasonable time, it does not pay to violate the system merely for the sake of satisfying such whimsical people. Some will recoil at the thought of thus driving away a customer. Perhaps a customer may be lost, and perhaps not. It does not do to be too modest in business; right must be maintained to a certain extent. If the matter is explained and it is shown that a system is followed in looking after all accounts that are due, if the person injured is at all reasonable his trade will seldom be lost. This will lead to a better understanding, and the customer may make some arrangement when he will be expected to pay in future, and then it is known what to expect of him.

But the fear of offending is often more fancied than real. People as a rule expect to pay their bills and have no objections to the merchant sending them statements at regular intervals. In almost every case

where people become angry because they are dunned they will prove to be undesirable customers. They take offence, or pretend to be offended, because they have been asked for such a degrading thing as money, and act as if the merchant should consider himself honored by having the opportunity presented him of selling them his wares. The good or bad opinion of such people counts for little. The public at this age of the century is too well informed of business methods to take offence at receiving a monthly statement of account. So we again repeat that it does not pay the retailer to be weak kneed in this particular.

Send out statements every month or quarter, as may be determined which will best suit the business, and then follow up the statements. Let a polite collector call and the money will come in. There is a great deal in having a good collector. Some young man sent on this errand will do more harm than little. The main requisites of a good collector are that he should be always good natured, be able to make some pleasant or even facetious remark, persistent, and insist upon being told the exact date when he may receive the amount.

It does no good to be cross and gruff if he is put off by such remarks as "Never got your bill," "Haven't checked your account yet," "Come in next week," or "I will call in and settle." These and other replies equally evasive are always fired at the new comer, and if he is a little soft he takes them for the solid truth, and thus makes his weary rounds, but fails to collect the cash. The collector of opposite character who meets such a reception with pert and impudent replies is equally as unsuccessful, and does his employer positive injury as well. The former individual who is so easily "put off" is a great favorite with the people who are not fond of paying their bills promptly. They always meet him with a smile, and keep him calling until his successor is appointed.

It requires great tact to collect bills. These people are so polite and seem so anxious to oblige one with that little amount were it in their power, but Mr. So-and-So promised them some money last week, but they have not got it yet, and they are actually filled with remorse and shame that they cannot possibly accommodate you to-day. The collector must be able to "size up" his man, and let him understand that though he may put off the other fellow, he has come to collect that bill.

When they find that he means business they will pay him or give a date when they will, and in most every case they will do as they say, if the collector has grit and they realize that he will give them no rest until the bill is paid.

A NEW PRODUCT.

FOR some months back there has been considerable activity in Barbados in certain districts in the island where a species of asphaltum glance (locally called "manjak") has been discovered, according to a contemporary. Manjak resembles Trinidad "pitch," the Utah "gilsonite," and the Mexican "albertite," but is stated to be of superior quality to any of these. It is supposed to equal the Egyptian "asphaltum" in quality, but we are not sure as to the correctness of this view. The analysis of best quality manjak is:

Moisture	2.00
Volatile organic matter	70.85
Non-volatile organic matter	26.97
Mineral matter .....	.18
	100.00

but some samples contain rather more (about 5 per cent.) moisture and mineral matter. Referring to the analysis of Trinidad "pitch," we find that it contains between 21 per cent. and 30 per cent. moisture, and about 38 per cent. ash, so that the superior richness of manjak in natural bitumen, as compared with Trinidad pitch, is evident.

Among the various uses to which manjak has been successfully applied may be mentioned:

- As insulation for electric wires.
- As varnishes of best quality.
- As bituminous concrete in asphalted roads and pavements.
- As patent fuel, mixed with peat or other organic matter.
- In small percentages, as an intensifier of the illuminating power of coal gas.

Such satisfactory results have been obtained by its use for insulation that it is expected by some experts that it will soon supplant rubber in all waterproof work.

It is difficult to say how much manjak there is in the island. Veins are most erratic; they have been found accidentally, have promised well, and ended abruptly. In other cases they widen out the deeper one gets, but there is always an air of uncertainty as to the length, width and depth of even the best veins, and contracts can only be entered into provisionally.

Large quantities of manjak have been shipped to the States, and it is now finding a market in England and Germany. The price has varied considerably and shows a tendency upwards as new uses are discovered for the article.

Another article largely met with in certain parts of this island is radiolarian (infusorial) earth. We understand this material enters largely into the composition of dynamite, boiler compositions, cements, etc., and samples have been sent away in the hope that Barbados may have something to fall back upon should the sugar market finally extinguish its staple industry.

JOBBER AND RETAILER.

MR. W. H. Preston, ex-president of the National Credit Men's Association of the United States, in a recent speech, gave utterance to some timely thoughts. He, after years' service in both the capacity of retailer and of jobber, could speak without bias either way.

The following are some principles he emphasized: "The jobber is an economic necessity from the fact that his buying in carloads from different factories, and placing them at some central distributing point enabled him to sell an assorted order of goods in small quantities at a better rate than the retailer could buy in small quantities direct from the different factories. Then the manufacturer needed an outlet for his goods upon which he can depend, and the jobber with his traveling men in every part of the country is a much more reliable outlet than the retailer would be.

"The jobber is under obligations to his natural outlet, the retailer, not to sell to the consumer direct, or even to catalogue stores, who through unfair methods of advertising, etc., are doing an all-round injury to the trade.

"Each retailer should be patriotic to the place wherein he does his business, should help build it up, and influence others to do the same. All money sent away weakens, all spent inside strengthens, the resources of the town, thus decreasing or increasing the possibilities for business.

"The organization of the retailers is advisable, not for the purpose of class legislation or persecution of any bodies, but for the adoption and encouragement of better business methods and the education of the consumer to loyalty to home industries and enterprises and also to the improvement, if not abolition, of the credit system.

"Exchange of goods for farm produce is an unbusinesslike system that should be ended at once. It would be of advantage also if all prices were put on a cash basis, and if credit must be had, an open and legitimate charge of interest should be made.

"Legislation is not necessary nor advisable in dealing with department stores, as the general stores are all department stores to a great extent. Unless the retailer convinces the consumer of the ultimate disadvantage of the catalogue stores, these stores will continue to encroach upon the business of the retailer."

PROSPECTING OUTFIT.

Guest & Co., Queen street, Toronto, are at work on an invention of Mr. Fred. Anderson, manufacturing jeweler, Toronto, which, if successful, will be a boon to mining prospectors. It is a prospector's outfit, for the purpose of drilling, testing and assaying

PERFECTO VARNISH

Is made for the Retail Trade. It is suitable for both outside and inside work. It comes as near being a perfect varnish for general use, as it is possible to make a varnish just right for many different purposes. It is just the thing for such work as bath rooms, boats and outside doors, where good tough varnish is necessary. It is also good for floors and general interior work. It can be rubbed and polished, and ALWAYS HAS A GOOD GLOSS.

If you keep Perfecto Varnish on your shelf you can fill almost any call for good varnish. It is packed in ½ pints, pints, ¼ gal., ½ gal., 1 gal. tins. 10 gallons assorted in a case. The price is \$2.25 per gallon in case lots.



THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

ore, and, though it will be of such size that it can be carried in a hand-satchel, it will be of sufficient strength to meet all the requirements of a prospector.

Mr. Anderson's model, when tried, proved quite satisfactory, and he is confident of the success of his invention.

DEATH OF AN IMPLEMENT MAN.

One of the pioneers of Canadian implement making, Mr. Jesse O. Wisner, died at his home in Brantford recently at the age of 86 years. Mr. Wisner was a native of New York State, but came to Canada while still a young man, where he started business for himself in 1857.

The business was a continued success, and a few years later Mr. Wareham S. Wisner was taken into the firm, the name of which became Wisner & Son, and in 1881 Mr. E. L. Goold became a partner.

Many patents were issued to the firm, and it steadily grew until it became the leading industry of its kind in Canada.

Some six or seven years ago the Massey Co. and A. Harris, Son & Co. were amalgamated with the Wisner Co., when Mr. Wisner retired from business, and since then, up to the time of his death, lived quietly at his home in Brantford.

HORSESHOE ATTACHMENT.

An ingenious and desirable invention which secures several objects is a horseshoe attachment. It is non-slipping on ice, will not become snow-clogged, can be adapted to shoes of any size, and be detached when desired.

In the construction of the device a toe plate is formed, somewhat broad and flat, to set under the forward surface of the shoe. This plate projects back a little, and has a thin lip that engages over the shoe edge, holding the plate into engagement forwardly. A pair of divergent curved arms are pivotally connected to the plate, the rear terminals of these arms being formed with heel calks. A cross plate just forward of the heel calks is riveted or screwed to one of the arms. This plate is slotted and a screw passed through this slot is threaded into the other arm so as to allow lateral adjustment to fit wide or narrow shoes. A lateral lip is also formed over the heel calk lug, which lip engages over the rear end of the shoe.

Normally, the shoe may be plain and flat, but in case sleet or icy roads develop, these attachments can be put on in a few minutes and be used during the prevalence of the icy conditions.

PAINTING AND REPAIRING ROOFS.

A ROOFER, particularly in the smaller cities, is compelled to do plumbing and sell stoves if he has any desire to amass, I was going to say wealth, but I guess I'll change it to a mass of pork and potatoes, says a writer in Metal Worker. This variety of trades is apt to keep him moving at this time of the year, but the way times have been he has had plenty, yes, a surfeit, of leisure to think and to scheme how he can make a few dollars. I guess I should have said a dollar and saved the few. This writing business is rather perplexing, for how can a man save a few when it is hard to make a solitary dollar?

To resume: He must let no chance pass, and to that end he should inform all who have roofs and gutters that there is no better time of the year than the fall to have them repaired and painted. A long winter, with its snows, sleets and freezes and thaws, is apt to try a roof and is sure to find the weak spots in one that needs attention. To repair a roof it takes a man with experience to look in the right place and it requires some skill to do the tinning on old rusty tin before the soldering is begun.

It is quite the fashion now to use acid for repair soldering, and many men make no attempt to remove the acid after the soldering is done. The surplus acid should be wiped off with a wet sponge, and a bucket of water should be handy for the purpose. I can get pay for this trouble with my old customers, to whom I have explained all about it. After the roof is attended to the gutter should be more carefully gone over, particularly if it is a box or valley gutter that might leak within the house wall. If it is a hanging gutter it should be lined up and have new straps where needed, and the

spout head and leader should be looked over.

Then comes the painting, and the material used is of considerable importance. The best is none too good. Don't buy cottonseed or fish oil, but get good boiled linseed oil. Then don't take zinc white, but get good white lead; there are several qualities, and the best is what you want. For coloring yellow ochre is less objectionable than some of the other materials and colors. Mix these properly, and if the weather is good very little drier will be needed, and what is used should be a good japan drier in preference to turpentine. I was first given this information by an old and highly esteemed painter, but did not profit by it; but a short time after another man of varied experience in outdoor painting gave me the same receipt, which I have tested to the satisfaction of my customers. Now is the time to paint roofs, for there is no hot sun to blister the paint before it dries, and if it is done now it will stand longer than if done when it is freezing weather or when the weather and sun are hot.

THE "KRASEL" ASH SIFTER.

The sales of the "Krasel" ash sifter during the past few weeks have been extremely satisfactory. With the arrival of cold weather and the consequent lighting of stoves and furnaces, the manufacturers look for an even greater demand and advise the trade to place their orders early and thus make sure of prompt delivery of goods. Dealers who have not already seen one of these sifters should send for a sample to the manufacturer, P. R. Krasel, 2529 St. Catherine street, Montreal, who will send same, express paid, to any part of Canada. Those of our readers who do so will confer a favor by mentioning **HARDWARE AND METAL**.

MUSKETS.

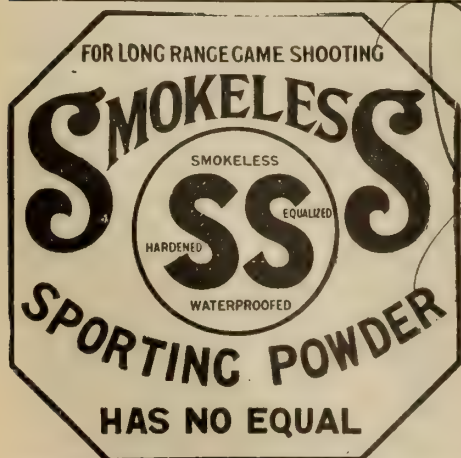
WHILE the introduction of portable firearms into Europe is of comparatively recent date, their use was frequent among the Mohammedans of eastern Asia at a very early period. La Brocquiere, who made a journey to Jerusalem in the middle of the fifteenth century, and who traveled extensively in the east, mentions the firing of small harquebuses at the great festivals in Damascus.

The first use of muskets in Europe was at the siege of Rhege, in 1591, by the Spanish soldiers. These arms were so extremely heavy that they could not be used without a rest. They were provided with matchlocks, and were effective at a considerable distance. While on the march the soldiers themselves carried only the ammunition and the rests, and boys, bearing the muskets, followed after, like caddies on a golf-course.

Loading these cumbersome arms was a slow operation. They were clumsy and awkward to handle, the ball and powder were carried separately, and the preparation and adjustment of the match took a long time.

Before long, however, improvements began to be made. The guns became lighter in construction, and the soldiers carried their ammunition in broad shoulder-belts called bandoliers, to which were suspended a number of little leather-covered wooden cases, each of which held a charge of powder. A pouch, in which the bullets were carried loose, and a priming-horn hung at the sides of the soldier.

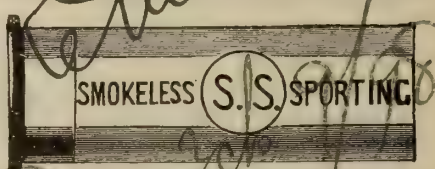
As late as the time of Charles I. muskets with rests were still in use, and it was not until the beginning of the eighteenth century that firelocks were successfully employed.—Harper's Round Table.



High Velocities. Low Pressures

Long Range. Extra Hardened. Double Waterproofed. Reliable. Safe. No Jar. Hard Hitting. Quick and Strong, with Perfect Combustion. The Favorite Powder. The Choice of Experts. The Powder of Powders for a variable climate. **SOLE MANUFACTURERS:**

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Works: Barwick, Herts



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UNEQUALLED RECORDS.

VELOCITIES:

At 21 1/2 yards, 1012'68 feet per second.
" 43 " 872'72 " "

Far in excess of any other Powder—Nitro or Black.

Pattern 233.

Pads penetrated (Eley's Special) 30'6.

Pressures 2'17 tons only.

All future issues made to this standard.



SMOKELESS RIFLE AND REVOLVER POWDERS.

(SR) For Martini-Henry and similar large bore rifles; also for punt guns.

"Rifleite '303." For Lee-Netford and other Magazine and Sporting Rifles, '236 to '315 calibre.

"Rifleite '450." For Sporting, Express and Military Rifles, '360 to '577 bore.

(SK) For Rook and Rabbit Rifles of '230 to '380 bore also for Morris Tubes.

(SV) For Revolvers.

Full report of trials can be had on application to the Company or their Agents; also copies of

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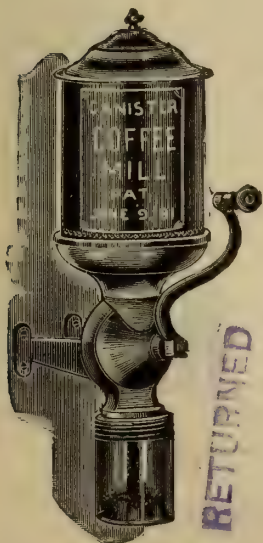
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use . . .

Canister holds 2 lbs. Coffee.



Felt Weather Strip

Excludes all Cold, Wind, Dust and Rain.

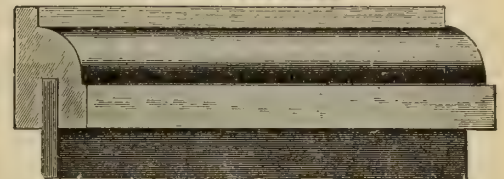
No. 60



FOR SIDES AND TOPS OF WINDOWS

RETURNED

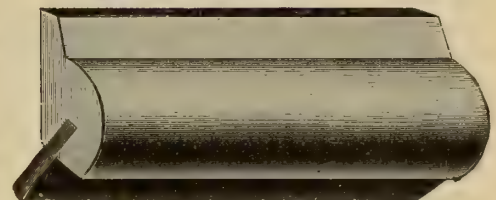
No. 61



FOR SIDES OF WINDOWS AND DOORS

RETURNED

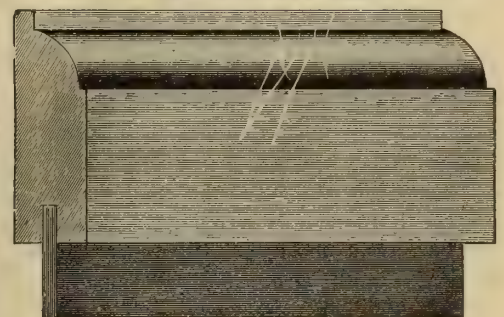
No. 62



FOR CENTRES OF WINDOWS

RETURNED

No. 64



FOR BOTTOMS OF DOORS

RETURNED

ORDERS FILLED PROMPTLY

GRAHAM Wire and Cut Nails are the Best.

H. S. HOWLAND, SONS & CO., TORONTO.

RETURNED

PROCESS OF ENAMELING METAL.

COMPARATIVELY few people might, at first mention, grasp the prodigious magnitude of the interest or industry to which the present invention is applicable, says Progress. The bicycle frames by the hundred thousands come under the process, yet they form only a fraction of the objects to which enamel is applied. The greatest trouble in connection with enameled surface is the almost inevitable tendency to scale off in spots, producing ugly blemishes and exposing points of corrosion that eat into the metal. This scaling is due, in part, to the brittle character of the enamel, as commonly applied, an external blow or scratch knocking off a portion. Another cause is a slight oxidation of the metal surface beneath the enamel, which loosens its hold and it hangs only as a loose scale, ready to chip off on the slightest force.

An important improvement in the enameling process has been patented by Mr. John Boston, of Chicago, Ill., whereby the peeling off or scaling process is entirely overcome, the enamel being very cohesive, tough and elastic, yet with firmness in keeping with its office, taking a high and durable polish. The process includes the preliminary treatment of the metal surface so as to render subsequent oxidation impossible and to secure a practical unity of the metal and applied enamel.

In the preliminary process, the surface of the metal is first thoroughly cleaned, then dipped in a weak solution of aluminum acetate, after which it is placed in an oven and steamed for a little time, the temperature being about 212 Fahrenheit. The steam is generated from water in a vessel placed within the oven. This process decomposes the weak acetate, evaporating the acetic acid and leaving the metal surface covered with an aluminic coating. All loose particles of the coating are removed by wiping or rubbing with a cloth, after which the first coat of enamel paint is applied in the usual way. When this has been dried and polished the second coat is applied and baked in an oven containing a quantity of sodium chloride, which has been found by practice to increase the tenacity of the coating and to render it susceptible to a higher polish. A fortune awaits the capitalist who has the means and foresight to secure this valuable process.

ENLARGING THEIR CYCLE WORKS.

The Iver Johnson's Arms and Cycle Works, of Fitchburg, Mass., are building a two-storey addition 250 x 100 to their already large plant at that place, this action becoming necessary on account of increasing business. In addition to their regular models, this firm will now make low-priced wheels,

thus enabling them to supply their agents with a complete line.

About 800 hands are employed at the present time, and more will be added upon the completion of the new building, which will be equipped with new and modern machinery, and a valuable acquisition to their present fine facilities.

POSSIBILITY OF CYCLE SHOWS.

The opinion prevails that the National Board of Trade of Cycle Manufacturers will experience considerable difficulty in abolishing cycle shows. The marked tendency of the local dealers in the big cities to hold exhibits indicates that the ruling of the board is not going to be received passively. Local trade folks anticipate that the National Board, realizing the strong sentiment in favor of shows, will yet see fit to reconsider the question.

BICYCLE NOTES.

A paper saddle is one of the latest novelties in the bicycle business. The papier-mache is susceptible of receiving a very high-grade enamel finish, which can be cheaply renewed.

Six hundred rims per day is the output of the Bowmanville Wood Rim Co. to supply English orders.

WORLD'S PRODUCTION OF COAL.

The following table has been compiled by Dr. E. W. Parker, of the United States Geological Survey, giving the coal output of the principal countries for the years nearest 1896 for which figures could be obtained. The table will appear in the Report of the Survey for 1896. The long ton is, of course, 2,240 lbs, and the short ton 2,000 lbs.:

Country.	Usual unit in producing country.
Great Britain, 1896, long tons.....	195,361,260
United States, 1896, long tons	171,416,390
Germany, 1896, metric tons.....	112,437,741
France, 1896, metric tons.....	29,310,832
Austria-Hungary, 1895, metric tons.....	32,654,777
Belgium, 1895, metric tons.....	21,213,000
Russia, 1896, metric tons.....	9,079,138
Canada, 1896, short tons	3,743,034
Japan, 1893, short tons	3,400,000
India, 1895, long tons	4,441,890
New South Wales, 1895, long tons.....	3,737,536
Spain, 1896, metric tons	1,878,399
New Zealand, 1894, long tons.....	719,546
Sweden, 1895, metric tons.....	223,652
Italy, 1895, metric tons.....	305,321
Transvaal, 1895, long tons	1,152,206
Queensland, 1895, long tons.....	322,977
Victoria, 1895, long tons	194,171
Natal, 1895, long tons.....	153,951
Cape Colony, 1895, long tons	87,085
Tasmania, 1895, long tons.....	36,856
Other countries	2,000,000
Total in English tons	589,732,000
Percentage of Great Britain.....	33.1

The total under "other countries" includes China, Turkey, Servia, Portugal, United States of Colombia, Chili, Borneo and Labuan, Mexico, Peru, Greece, etc.

ROUND AND SQUARE CAST-IRON COLUMNS.

Cast-iron or rolled-steel girders are now being employed to a much greater extent than formerly in the London building trade, according to The Iron and Coal Trades Review, of that city. Many architects seem to have a preference for square cast-iron columns, which are generally understood to be exceptionally liable, from the shape and manner of manufacture, to be strained by unequal contraction in cooling, a risk which round columns are not subjected to to nearly the same extent. Even with the iron best suited to the requirements of building construction, one side of the rectangular box forming the square column is almost sure to cool much more rapidly than the other, after casting; and thereby becoming shorter in length than its adjoining side, a strain is brought upon one or both of the corners which join it to its neighbors. The accident of unequal cooling may originate in the manner or speed of pouring, in the state of any part of the mold, or from the casting being uncovered unequally and thereby exposed in parts to the cooling effects of the air. If in connection with these accidents there be any inequalities in the thickness of the four sides of the column, it is well known that the thick side will retain enough heat to make it continue to contract in length long after its thin neighbor has cooled. With the angle of a square column, the thick side will continue to contract long after the other has "set," and the amount of differences in the contraction of two parts can easily be nearly 1-16 inch in one foot length. In a column 16 feet long this difference would be one inch, sufficient to put such a strain upon the structure as to make its use extremely hazardous.

Gross earnings of the Canadian Pacific Railway from January 1 to September 30 were \$16,330,811, as against \$14,628,712 in the corresponding period of 1896, and \$12,595,538 in the corresponding period of 1895, showing an increase of \$1,712,099, as compared with 1896, and an increase of \$3,735,273 as compared with 1895.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
J. O. GRAVEL, Sec.-Treas.

FRS. SCHOLLES, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
.. Manufacturers of the . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch: Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.

THE SAND BLAST ON STEEL STRUCTURES.

THE preservation of iron and steel structures from corrosion is among the grave concerns of the modern builder and architect, says Age of Steel. The extensive use made of this material in the huge buildings and bridges characterizing modern practice has made the necessity of their preservation more palpable and important than ever. In the case of viaducts and bridges, where exposure to the elements and every changing phase of atmospheric conditions is unavoidable, the policy of adequate protection from the standpoint of economy and security becomes definite and positive. Corrosion is a deadly enemy to the stoutest of metallic frame-works, and it can bite its way in silence into the heart of the most massive structures. In the case of bridges, the free use of paint has postponed the inevitable, but the skin of pigment is seldom more than a temporary precaution. An example of this is shown on the big viaduct of the elevated railway in the city of New York. About five years ago this structure was thoroughly cleaned and painted, and it was thought that this precaution, along with careful maintenance, would make it last at least a lifetime. At the point over the elevated railroad, however, the corrosion, due to the escaping gas

and steam from the hundreds of locomotives passing and standing beneath, has completely destroyed the paint and is now rapidly eating away the steel, thus slowly and surely destroying the life of the viaduct.

The Commissioner of Public Works, in casting about for a remedy, or some better method of protection, acting under the advice of the consulting engineer, decided to adopt the sand-blast process, to break away the scale and oxide, and to thoroughly clean the metal. There are 51,000 square feet in the structure that are rust-bitten, and it will take about seven weeks to remove the corrosion. The application of the process has, so far, given satisfaction, and its ability to remove the rust and preserve the structure is in a clear way of practical demonstration. The result of the New York experiment will be watched with interest. It is proposed to sand-blast all the iron and steel work of the new East River bridge before putting it in place. Should this be successful and a precedent established, this plan may eventually come into general practice.

CANADIAN BUSINESS.

Advices received this week from Canada show that our pushing German rivals are "going for" Canadian trade with more than their ordinary doggedness. It appears that they "went Nap." on what they deemed—and rightly deemed, as it turned out—the



Established
1860

Incorporated
1895

OIL HEATERS

New Process

RETURNED
Dec 27/13
J. O. M. A.
Handiest and most economical Oil Heater made. It will heat a 20-foot room in zero weather at a cost of about 2c. per hour.

Pure white flame,
smokeless and odorless.
Removable oil fount.

Coal Hods
Stove Boards
Fire Shovels
Stove Pipes
Elbows, etc.

THE THOS. DAVIDSON MFG. CO.

MONTREAL
General Agents for Canada

Limited

certainty of the 12½ per cent. extra duty being returned to them, and have literally flooded the Dominion with samples and travelers. Evidently they mean to make the most of the time which has to elapse before British goods get the 25 per cent. advantage, and it follows that if we are to reap all the gain that will then be possible we shall have to go about the work in an equally energetic, thorough and systematic manner. The Teutons really merit praise for their prompt and painstaking push into Canada—but I fancy the Canadian manufacturers don't view it quite in that light!—Ironmonger, London.

FAVORS AN EXPERT.

Exporters of hardware to Canada will be interested to learn that the Metal and Hardware Association of Montreal have called the attention of the Canadian Government to the desirability of the appointment of an expert Customs appraiser for hardware. This action was taken in view of the fact that Customs officials at the different ports of entry did not make the same interpretation of rates to be charged on the same classes of hardware. The appointment of an expert appraiser, to visit the various ports of entry and systematize the work, it is contended, would remove the injustice of the present system. Now that Canada has adopted a tariff under which all British goods (liquors, tobacco and sugar only excepted) are admitted to the Dominion at a lower rate of duty, it should certainly see to it that the drawbacks such as those referred to are obviated.—Ironmongery.

WHEELS FOR 1898.

IN THE estimation of many of the Canadian bicycle manufacturers it is believed that the cycle industry in 1898 will be upon a firmer basis than ever, that the prices of high-grade mounts will be reduced to \$75, and that a few improvements looking to the promotion of ease in running and added rigidity of frame will again be recorded.

The wheel trade is assuming a more stable character, and abuses which crept in during its earlier days must needs, therefore, be corrected.

The manufacturers regard the guarantee as perhaps their worst bogey, and in view of the reduction in selling prices its total abolition or shortening to a 30 day or 90 day term is bound to come sooner or later. Whether this step can be taken in 1898 or not depends upon the getting over the difficulty of securing uniformity of action between the several manufacturers.

If the guarantee system was done away with public attention would be diverted more towards the higher grade article, as, in view of the fact of having to stand sponsor for their own repairs, buyers might naturally be expected to give the preference to wheels of established reputation.

Regarding changes in construction and design it is impossible to speak accurately. After an inspection of a few of the 1898 models now out, the noted improvements are principally: lower frames (probably starting the average at 24 inches), narrower tread (average $4\frac{1}{2}$ inches for roadsters), slightly increased drop in the bottom bracket. In this last named particular makers will err if they exceed $2\frac{1}{2}$ inches upon road wheels.

As during the past season, flush joints and larger combinations will be in favor, the former having "stood up" and the 9-tooth rear, with corresponding front sprockets, having given the best of satisfaction. Much has been heard of and written regarding the chainless pattern, but sifting everything down it may be taken for granted that the bevel gear will not, during the coming year at least, supersede the chain. Before demanding the new innovation, buyers will await the determination of its success by actual use.

ROSSLAND ITEMS

The Rossland Miner of October 5 gives great prominence to a discovery of a valuable body of pyritic ore in the Iron Colt mine. The ore chute is said to be a solid mass of pyritic ore six feet wide and entirely free from gangue, and is widening and improving steadily. It is as solid a body of ore as has been found in the Rossland

camp. The managers of the company are confident the vein extends the full length of their mine. The discovery of this vein, The Miner editorially states, demonstrates that the ore bodies on the north belt extend from the famous Le Roi mine to the Iron Colt, a distance of over a mile.

On the same day a new compressor plant was installed at the Sunset No. 2 mine, making it possible for the development of that mine to be immediately proceeded with.

The shipments of ore from January 1 to October 1, from the Rossland camp, amount to about 57,400 tons, of which the Le Roi shipped about 43,600 tons. Over 2,700 tons were milled in the camp from January 14 to June 19 inclusive.

A SENSIBLE CONCLUSION.

IN an interview in London, Eng., last week the Canadian Minister of Customs, Hon. Mr. Fielding, stated that "though the present tariff falls short of his free trade intentions and ideas, tariff tinkering is most harassing to trade. Hence, no material change will be made next session."

This may not be good news to politicians whose delight is to meddle with the tariff, but it will be good news for the business men of the country, and should be scattered broadcast over the Dominion.

Aside altogether from the merits of free trade or protection, to undertake any important change in the tariff at the next session of Parliament would be a mistake.

It does not matter whether the work be controlled by free traders or protectionists, tariff revision means, for the time being, quiet trade.

Just now the first step towards a revival of trade has been taken, and the general outlook in Canada is better than it has been for a number of years. To meddle, therefore, with the tariff at this juncture would not only be short-sighted: it would be positively foolish.

HARDWARE AND METAL is glad the Government has decided to do the sensible thing, and it is to be hoped it will not allow theorists or impracticable persons to deter it from its purpose.

The tariff may have its anomalies, but it is better that there should be a few anomalies than that the whole country should suffer.

SISAL ROPE AGAIN ADVANCES.

Sisal rope this week shows a still further advance of one-fourth of a cent a pound. This makes a total appreciation of three-eighths of a cent in two weeks.

The strength of the market is due, it appears, to a scarcity in the raw material.

ONE WAY TO GET GOODS.

MANY people often wonder how department stores manage to get goods made by manufacturers who constantly declare they do not sell such trade or permit their jobbers to do so, says an exchange. Sometimes there may be a leak somewhere which the maker or distributor may be instrumental in creating, but the following instance, given in The Reporter, which is especially worthy of quoting on account of its rather romantic nature, shows clearly how houses holding decidedly rigid views regarding the department store trade could be deceived, although in this case the makers involved happened to be regular sellers to the department stores.

Down in the city of Mexico is a large importing house, one of the members of which is a fiery Spaniard and the other a native of the Emerald Isle. The latter married the former's sister, and the net result was a son who, as he grew into manhood, showed a udicious mingling of Celtic and Spanish characteristics that promised a rather aggressive career. The promise is on the way to fulfillment. Last summer the young man took a little vacation from his desk in his father's office, and accompanied by a bag of money and a boom companion went up to Chicago.

He immediately visited the department stores and found two articles, sold by the hardware trade, which the department stores were pushing very energetically and having an immense sale on. He then went to the manufacturers, both of whom are in Chicago, and told them that he believed he could work up a big sale for their goods in Mexico. He would have to ask them to make him a very low price the first year, he said, as the cost of introduction in Mexico would be great, but that afterwards he would pay their regular quantity rates.

The manufacturers were suspicious, but the young man smoothly answered all questions, and as he was posted as to prices and had the cash with him it ended in their selling him several thousand dollars' worth of goods at a price considerably below that given the department stores, and which pretty nearly eliminated profits from their side of the transaction. The young man paid for the goods and had them shipped to St. Louis, where he said he would make up his car lots for Mexico. When the goods reached St. Louis he was there to receive them and shipped them immediately back to Chicago, where his companion had no difficulty in selling them to the department stores at about 75 cents a case below the manufacturers' quotations. Quite a neat little sum was realized by the operators, and when the manufacturers next visited their largest customers in Chicago they found them loaded up with their goods for several months ahead.



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Catalogues and Price List on application.

AMONG THE RETAILERS.

Fall Trade in Full Swing.

The fall trade has opened in earnest, the cool weather bringing numerous orders for ash sifters, window glass, coal scuttles, and many other household articles not needed in the warmer days of summer. The lengthening of the evenings has also created a good demand for lanterns, lamps, etc. The demand for preserve jars has largely subsided, a good supply now being on the market. Toronto retailers are doing a large business in stoves and pipes, a greater quantity and a better quality of goods being ordered this year than usual. The Fletcher Manufacturing Co., Toronto, dealers in bakers' and confectioners' supplies, are busier now than they ever were before, the demand extending to all classes of these supplies.

Good Window Displays.

The hardware merchants in the vicinity of the St. Lawrence market, Toronto, have quite an active competition in window dressing. Russell's, "in the market," have in one of their windows a good display of seasonable articles. The centrepiece of the display is a finely polished stove, in the grate of which they have some coal painted a ver-

million color, that is lit up in the evening by an invisible incandescent light. The effect is very similar to an ordinary coal fire, and attracts much attention. Lanterns are hung in the back and at the sides of the windows, while the floor is covered with a well-arranged supply of cutlery, table silverware, etc. The price of each article is neatly labelled on or near it; a good policy. Wheeler & Bain have also a very good display of stoves and stove polishes, the variety of which latter article is astonishing. Thos. Meredith & Co. have again brought into use the wooden anvil, notice of which was given in the special spring number of *HARDWARE AND METAL*. This time it is being used to display pocket cutlery. Before it was chisels, files, etc.

Business Tact.

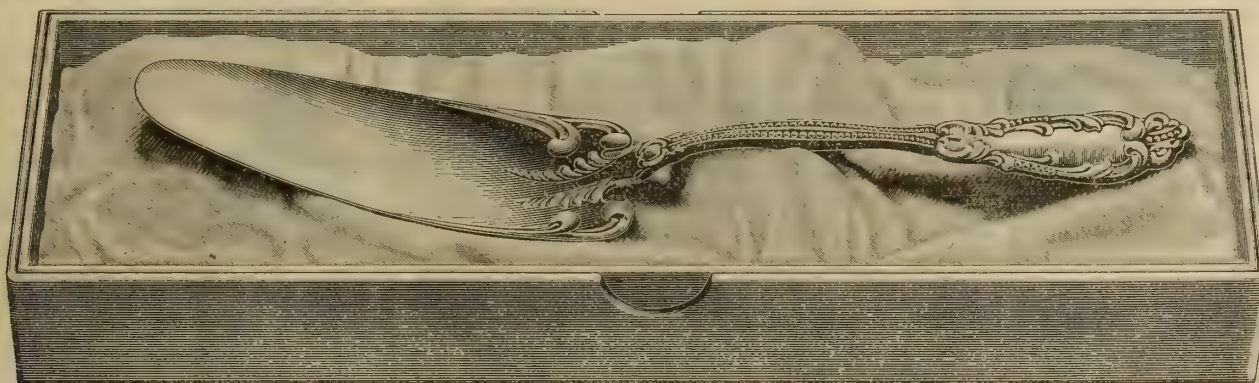
All men are not endowed with an equal amount of that blessing of the business man, tact; but many do not make use of what they have got. In these days of bargain hunting and rate cutting it is hard to keep a good number of regular customers and yet harder to regain a lost customer. It is also hard to keep some customers who run up a credit account to buy all they can pay cash for in the same store. Yet these are not impossibilities.

One dealer who does not cut rates has a habit of taking his customers into his confidence, and giving them full information as to wholesale prices, etc., and showing how, if a dealer cuts rates on one article, he makes it on another. This dealer says his customers are numerous enough to make a good business, and they are smart, wide-awake people who buy the best goods, thus making their business a profitable one.

THE RAMBLER.

NEW IDEA IN GLASS CHIMNEYS.

On September 21 a patent was granted to Herbert R. Hill, of Herkimer, Kansas, for a lamp chimney; patent No. 590,483. It is the object of this invention to provide a lamp chimney which may be handled without leaving finger marks on the polished glass, and also provides a chimney which may be readily placed or taken from the lamp when the chimney is hot, and without burning the fingers of the person handling it. The lower cylindrical portion of the chimney is provided on its opposite sides with recesses, and in said recesses are secured, by glue or cement, pads of felt, cloth, wood, or other analogous material. In removing the chimney when it is hot the fingers come in contact with the pads, and the chimney may be removed or placed in position without the necessity of having the fingers come in contact with the glass.



Marina Pattern Jelly Server in Case.

We have a large and varied line of fancy pieces of Flatware in Plush Lined Paper Cases, or more expensive Cases if called for.

New goods in every line of our manufacture. See what we have to offer before placing your Christmas order elsewhere.

THE TORONTO SILVER PLATE CO., Limited

Factories and Salesrooms, King Street West, TORONTO, Canada.

E. G. Gooderham, Manager and Sec.-Treasurer.

CENTRAL PRISON BINDER TWINE.

A PETITION is being circulated among the hardware trade in Toronto asking the Ontario Government to discontinue the manufacture of binder twine at the Central Prison, and it is receiving a good deal of support.

"As you know," remarked a well-known wholesale hardware dealer, "the binder twine factory at the Central Prison suffered a great deal of loss a few weeks ago from fire, a great deal of the machinery used in the manufacture of twine and rope having been considerably damaged. This is, therefore, a favorable opportunity for the Government to drop out of the manufacture of binder twine, especially as it is an article which next season will be on the free list. The Ontario Government, under some pressure from its farming friends, put in a plant, as you will remember, a few years ago for the manufacture of twine, the farmers giving the Government the impression that there was a monopoly in Canada on this article, and that they were being charged more for their twine than they should be. From the standpoint of the trade this is not an actual fact. The price of twine in this country as compared with the United States was not out of the way. One fact, which must be taken into consideration, was that the price in Canada was, to some extent, dependent on that of the United States. For instance, if the crop was large in that country the consumption of twine was, of course, also large. If, on the other hand, the crop of grain was small the consumption of binder twine was also small. Now then, as the crop in the United States is taken off earlier, as a rule, than in Canada, it gave the binder twine manufacturers in that country a chance to unload their surplus stock in Canada, should such exist, and this surplus stock was, as a rule, sold at slaughter prices.

"As a matter of fact, the binder twine industry, as established by the local Government, has been a failure, resulting in much loss to the Government, owing chiefly to the fact that it purchased its raw material when the market was high and sold its finished product when the market was low. In fact, I believe that the finished article has been sold in some instances at about the price which was paid for the raw material.

"There are between 1,800 and 2,000 operators employed in the legitimate binder twine industry of the country, and it is to be hoped that the Government will see its way clear to discontinue the manufacture of binder twine at the Central Prison and thus remove that which is injuring free labor and depriving legitimate dealers of a fair profit."

COMBINATION IN THE TUBE TRADE.

It is stated that the necessary documents for the registration of the Cycle Tube Agency, Ltd., with a capital of £100,000, have been forwarded to London. The object of the

agency is to control prices, and generally to defend the interests of the home manufacturer against the foreigner. We understand, says Hardwareman, that the whole of the English manufacturers and the one Scotch firm engaged in the industry have entered into a five years' agreement to regulate their business on a common basis, and a controlling body will be elected from among their number. It is hoped by these means to modify violent fluctuations in the tube market, and to largely eliminate the speculative element. It is stated that important negotiations with American manufacturers have been proceeding during the past fortnight, and the prospect is held out of a harmonious understanding between British makers and their rivals on the other side of the Atlantic.

THE HARDWARE CLERK'S LOVE-LETTER.

Dear Bell:

I love you Mower each day!
Of Awl the girls you are my Pick;
And if I ever have my way,
You may be sure I'll Steel you quick.
When first I Saw your golden Locks,
The Keys to which I held in part,
I hoped I could with Tackle Blocks
Draw you more closely to my heart.

Could I in my Repeating Arms
But Clasp you, little maid divine,
I'd Bolt you there with all your charms
And Rivet your sweet lips to mine!
I'd Chain your heart's door fast and fair
And Nail the Hinges on with bliss.
I really love you on the Square;
You'll find no Grater love than this.

So now I'll Screw my courage up
And Axe you if my name will fit.
If so, you're just the needed cup
Of Punch to Brace me up a Bit.
So come to-night and we will File
The Papers, dearest little Plumb:
I'll meet you at the outer stile—
Just Wire me if you can Nut come.

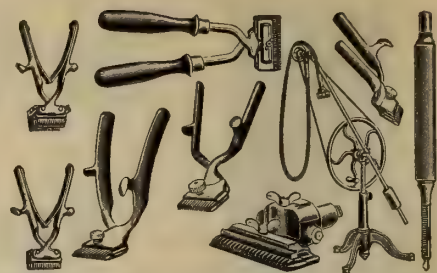
Your Adjustable

JACK!

—Hardware Dealers' Magazine.

A LARGE NAIL MILL.

Application has been made for a charter for a mammoth tin mill to be erected at New Castle, Pa., which it is said will be a 30-mill plant, the largest in the world. It will be erected between New Castle and Mahoningtown. The company is composed in part of President William Patterson, of the National Bank of Lawrence County; John Steveson, manager of the various industries run by the New Castle Wire Nail Co.; William E. Reis, of the Shenango Valley Steel Co.; Rufus Patterson, and others. The mill will cost about \$750,000, and the thirty mills will be driven by three pairs of compound engines, each pair being 200-horse power. The main building will be 1,650 feet long and 100 feet wide, and will contain the hot mills, the annealing house, pickling house and cold rolls. Another building, 700x60 feet wide, will contain the tin house, assorting rooms and warehouse. There will also be smaller buildings. The contract has been let to the Shiffer Bridge Co., of Pittsburg, for a trifle over \$90,000.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **THE COATES CLIPPER MFG CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring, "The Latest and Best." Sold by all Leading Jobbers in Canada.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods.
We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

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Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.



"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

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WISH THUS TO BUILD
an advertisement
in the
CONTRACT-RECORD,
TORONTO
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Stove Boards

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Good Assortment. Write for Prices.

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Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

A FIRE INSPECTOR

reports that more policies covering mills, warehouses, etc., are cancelled by reason of lack of fire pails than by any other reason. And yet it costs so little to equip premises with indurated fibreware round bottom fire pails made by



The E. B. EDDY CO., Limited

HULL, MONTREAL and TORONTO.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Oct. 15, 1897.

HARDWARE.

THE firm tendency of values in the general hardware situation continues as marked as ever, and the fact is having its influence on buyers, who are operating with freedom all along the list. This applies to wire cut nails, wire nails, and all such small goods, while cutlery and sporting goods are very brisk. Cordage continues to advance, scoring another rise of $\frac{1}{4}$ c. this week, and while shot is not higher, it has a very firm tendency. In cement some extensive operations are noted, and English has advanced 5c., and altogether the week's business has been very active.

BARBED WIRE—There is a fair demand for barbed wire, but demand is only for small quantities. Prices are held firmer here this week at \$2.50 f.o.b. Montreal.

PLAIN WIRE—Continues quiet and unchanged. Raw material is very firm and the margin between it and the finished article is very small, but prices are still at their former level with discounts 30 and 10 off.

WIRE NAILS—The makers have at last come to an agreement upon a minimum price for car lots, but the fact has not led to any alteration in the basis for less than that quantity, which still is \$1.85 to \$1.90 f.o.b. Montreal.

CUT NAILS—The feeling in regard to cut nails is firm and demand is quite brisk this week. The base price is \$1.85 f.o.b. Montreal, Toronto, Hamilton and London, with a rebate of 10c. per keg to regular retail traders.

HORSE NAILS—There is a fair enquiry for these, and the discount is 50 per cent.

HORSESHOES—In good enquiry, while prices are very firm in tone. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Good business doing. Discounts are: Flat head, bright, 87 $\frac{1}{2}$ and 10; round head do., 80 and 10; flat head, brass, 82 $\frac{1}{2}$ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Trading of a quiet kind at 12 $\frac{1}{2}$ per cent.

BOLTS—Demand has been fair at the advance both for prompt and forward shipment. Discounts are now: Carriage bolts, $\frac{1}{4}$ and 5-16, 70 per cent.; $\frac{3}{8}$ and up, 60 and 10; machine bolts, $\frac{1}{4}$ and 5-16, 70 per cent., and $\frac{3}{8}$ and up, 65 and 10.

RIVETS—A fair trade is doing and discounts are unchanged. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—Trade is steady at former prices.

FILES—Quiet. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4 $\frac{1}{2}$ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—Sisal rope continues to advance, the jobbing trade here being $\frac{1}{4}$ c. higher all round. Stocks are light both in first and second hands, hence the advance. Manilla is unchanged. We quote: Sisal, 7-16 and upwards, 6 $\frac{1}{4}$ c.; $\frac{3}{8}$, 6 $\frac{3}{4}$ c.; 5-16 and $\frac{1}{4}$, 7 $\frac{1}{4}$ c., and 3-16, 7 $\frac{3}{4}$ c.; manilla, 7-16 and upwards, 7c.; $\frac{3}{8}$, 7 $\frac{1}{2}$ c.; 5-16 and $\frac{1}{4}$, 8c., and 3-16, 8 $\frac{1}{2}$ c.

CHURNS—There continues to be a good enquiry for these.

CLOTHES WRINGERS—Very little trade passing this week.

BUILDING PAPER—A fair lot of orders are

noted, chiefly for moderate supplies for immediate wants. We quote 25c. for plain building, 35c. for tarred lining, and \$1.30 to \$1.40 for roofing.

LEATHER BELTING—There is a moderate trade passing.

HOLLOW WARE—All kinds of household ware, in tin, plain iron and enamelled, are being well enquired for.

HINGES—Quiet and steady. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—There is a brisk business in cutlery, chiefly for assortments of pocket and table knives.

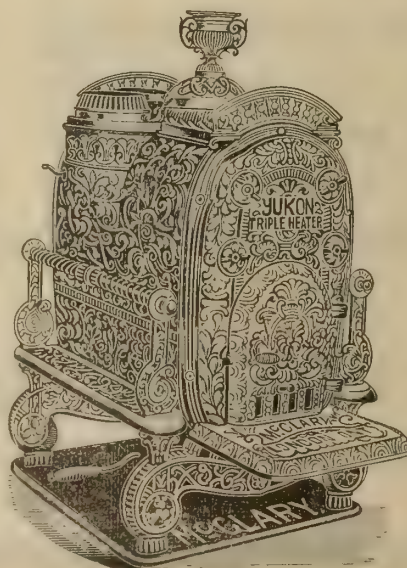
SPORTING GOODS—Demand for these keeps up well, and large quantities of rifles, guns and ammunition are moving.

SHOT—There has been no change in this article, but makers are very firm in their views, and an advance will surprise no one. We quote: Dropped shot, 6c.; chilled shot, 6 $\frac{1}{2}$ c., and buckshot, 7c., less 12 $\frac{1}{2}$ per cent. trade discount.

CEMENT—The feature has been the advance of 5c. in English cement, and sales at the advance, some 1,800 barrels changing hands at \$2.10 to \$2.20 ex wharf. A large business was also done in Belgian, several 1,000-barrel lots selling at \$1.85.

FIREBRICKS—Continue active and steady at \$16 to \$21 per 1,000, as to brand.

YUKON TRIPLE HEATER



The most complete and effective Heater made in the Dominion. Takes 30-inch wood. . . .

• Size of fire door opening 11 x 14 $\frac{1}{4}$ in. Shipping weight 460 lbs. Large hearth. 4-piece sectional linings that can be replaced through front door. Direct or indirect draft. Fire travels the entire length of stove three times before entering smoke pipe. Flues easily cleaned from front. Two very effective hot air flues that will distribute heat equally; one cannot rob the other. Strong leg base and nicked rails packed inside of stove for shipping.

List Price = \$33.68.

Order a sample early.

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver



Improved Wanzer Lamp

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER.

WANZER LAMP & MFG. CO.
HAMILTON.

Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

Send for Catalogue C.

The Wightman
Sporting Goods Co.

403 St. Paul St.

MONTREAL

METALS.

Trade in all kinds of heavy metals is exceedingly active, and as supplies of most lines are light consumers find it somewhat difficult to fill their requirements. Owing to this condition the situation favors still higher prices and they are expected shortly.

PIG IRON—The pig iron market is firmer, sellers now asking an advance of 50c. per ton as the outside price. We quote: No 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee, \$18 to \$18.50; Carron, \$18 to \$18.50; Ayrsonne, No. 1, \$17 to \$17.50; Eglinton, \$17; and Carnbro', \$16.50.

BAR IRON—The firm feeling in bar iron continues, and in some cases makers have refused \$1.35 for car lots. We quote the jobbing range firm at \$1.40 to \$1.50.

BAND IRON—There is a fair demand for this line, and prices rule firm on the bases of \$1.70.

HOOP IRON—The strength in outside markets is fully maintained, and prices here point higher though not quotably changed from \$2.25 to \$2.35.

SHEET STEEL—A fair trade is doing on the basis of \$2.35.

SHEET IRON—There is a brisk enquiry for black sheets of all the standard gauges, and prices are very firmly held at \$2.25.

GALVANIZED IRON—The same remarks apply to galvanized iron, and stocks are quite light here and the supplies near at hand are not excessive. Values, accordingly, are very steady at \$4 to \$4.15 for Queen's Head.

TINNED IRON—Quiet and steady on the basis of 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges the usual extras.

LEAD PIPE—If the price of this article does not advance before the close of navigation it is expected to immediately afterward. Demand is brisk and makers' order books also are well filled up. We quote lead pipe 7c. per pound and composition and waste 7½c., subject to a discount of 27½ per cent.

PIG LEAD—This metal continues very firm and round lots cannot be laid down for less than \$3.75. Accordingly the jobbing price is firmly held at \$3.85 up, according to quantity.

INGOT TIN—There is a good jobbing trade in tin on the basis of 16c.

INGOT COPPER—Steady and unchanged at 12 to 12½c. per lb.

SHEET COPPER—There is a good, seasonable enquiry. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

CANADA PLATES—Some shading is re-

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

— MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

Blue Hoop Horse Shoes

"1897 MODEL"

are in great demand. Sales increasing every day. Freights will advance shortly. Better send in your Fall order immediately, and secure a supply of the famous "Blue Hoops." All good Farriers insist on having them.

Manufactured only by

THE PILLOW & HERSEY MFG. CO. LIMITED - MONTREAL

ported on round lots of Canada plates, but to import values are steady, and the jobbing range here is unchanged at \$2.10 to \$2.25.

TIN PLATES—Supplies of these, though somewhat larger, are still far from liberal, and prices are held steady. We quote: Coke I. C., \$3 to \$3.15; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do. I. X., \$4.80.

TERNE PLATES—There has been no change in terne plates, which we quote at \$6.

COIL CHAIN—There is a good enquiry in a small way on the basis of \$2.85 for $\frac{5}{8}$ up.

SHEET ZINC—Moving out well, while prices have a stiffer tendency at 5 to $5\frac{1}{4}$ c.

SOLDER—Fair trade doing at $11\frac{1}{2}$ c.

SPELTER—Continues steady at $4\frac{3}{4}$ c.

ANTIMONY—Continues the same at $9\frac{1}{2}$ to 10c.

IRON PIPE—There is a good enquiry for iron pipe at the advance. We now quote as follows: Black pipe, $\frac{1}{4}$ -inch, \$2.05; $\frac{3}{8}$ -inch, \$2.05; $\frac{1}{2}$ -inch, \$2.45; $\frac{3}{4}$ -inch, \$2.90; 1-inch, \$4.20; $1\frac{1}{4}$ -inch, \$5.35; $1\frac{1}{2}$ -inch, \$6.90; 2-inch, \$9.35; and $2\frac{1}{2}$ -inch, \$13.60. Galvanized pipe, $\frac{1}{2}$ -inch, \$4.25; $\frac{3}{4}$ -inch, \$5.25; 1-inch, \$7.25; $1\frac{1}{4}$ -inch, \$10; $1\frac{1}{2}$ -inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—Buyers find it difficult to procure supplies of desirable scrap, except at holders' terms, and No. 1 wrought is not obtainable now under \$14 to \$15, as to quantity.

PAINTS, OILS, ETC.

The result of the makers' conference, as noted last week, is a postponement of advance in the price of white lead. Some manufacturers have sufficient supplies to serve till the close of navigation, so that notwithstanding firm markets abroad, there is not likely to be any further advance in white lead before November. The advent

of winter freights will add to the cost, but by that time buyers will have secured their winter supplies. We find no sellers for forward delivery, and makers have been unable to cover their own wants owing to a feeling of independence prevailing among corrodors in Europe. Turpentine has continued its upward career, and it is believed that the top is not yet reached. Arrivals at shipping ports are limited, and in the face of a steady demand, the factors are able to dictate steady prices. Linseed oil is without feature. General paints, colors, and also varnishes, continue in good demand.

WHITE LEAD—Demand very active on the basis of \$5.37 $\frac{1}{2}$ for Government standard; other grades in proportion.

RED LEAD—Firm. Pure, in casks, $4\frac{1}{2}$ c.; in kegs, $4\frac{3}{4}$ c.; No. 1 in casks, $4\frac{1}{4}$ c.

LIQUID PAINTS—The fall demand is very satisfactory, but no advance in price has been reported despite the higher price of raw material.

PUTTY—Business in this item is being competed for and prices are shaded. We quote: Bulk, \$1.50; bladder in barrels, \$1.65; tins in cases, \$1.90.

LINSEED OIL—We quote: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—Continues to advance, the present quotation being, $\frac{1}{4}$ -bbls., 50c.

NAVAL STORES—There is a fair enquiry for these. We quote: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, $4\frac{1}{2}$ to $5\frac{1}{2}$ c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

GLASS.

There has been no change in window glass, but, as noted last week, the feeling is very firm. We quote: First break, \$1.30; second break, \$1.45 per 50 feet; third break, \$2.90 per 100 feet.

CHEMICALS, ETC.

A fair trade is noted in heavy chemicals. We quote: Bleaching powder, \$1.80 to

\$2; bicarb. soda, \$2.25 to \$2.35; sal. soda, $67\frac{1}{2}$ to $72\frac{1}{2}$ c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.40 to \$1.60; do. roll, \$1.50 to \$1.75; sulphate of copper, \$4.37 $\frac{1}{2}$ to \$4.62 $\frac{1}{2}$; white sugar of lead, $7\frac{1}{2}$ to $8\frac{1}{4}$ c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

ASHES.

Ashes rule quiet and steady at the decline noted last week: First pots, \$3.50 to \$3.60, and seconds, \$3.25.

HIDES.

Unchanged; lambskins, 50c. each, and beef hides, 6 to 8c., as to grade.

PETROLEUM.

Canadian has been advanced 1c. to $14\frac{1}{2}$ for car lots. We quote: Canadian, $14\frac{1}{2}$ c. in car lots and $15\frac{1}{2}$ c. in smaller quantities; American, $16\frac{1}{2}$ c. in car lots and $17\frac{1}{2}$ c. for small lots.

COAL.

Without change. We quote: Stove and chestnut, \$5 75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Canadian petroleum is 1c. per gallon higher all round this week.

There has been an advance of $\frac{1}{4}$ c. in the price of sisal cordage, which is firm at the rise.

Advices from shipping points on turpentine are very firm, and higher prices are looked for.

English cement has been marked up 5c. per cask, and large sales have been made at the advance.

PERHAPS YOU ARE NOT AWARE that the most durable steel shingles are formed into shape **first** and then galvanized **afterwards**.

OUR

Galvanized Steel Shingles

are not cut out of large sheets of common galvanized iron, consequently there are no raw edges nor defects of any kind.

When you get OUR shingles you can depend upon their being coated **ALL OVER**, not in spots only.

The "Eastlake" and "Empire" Patent Shingles are **MADE ONLY** by us.

Beware of Imitations

Talk is cheap, but advertising costs money. Sensible people wouldn't advertise goods without merits. Unscrupulous people can imitate them at little cost. Do you want the real thing or the substitute? Insist on getting what you order.

Metallic Roofing Co., Limited

TORONTO

The Originators and Pioneers and most extensive makers of sheet metal building material in Canada.

ONTARIO MARKETS.

TORONTO, Oct. 15, 1897.

HARDWARE.

THE volume of business is much about the same as a week ago, having been well maintained. The feature of the hardware trade this week is the arrangement for a uniform price on wire nails, which are now quoted based upon the Montreal figures. Sisal rope has again advanced, the base now being 6¼c. per lb. Business in fall specialties continues to improve. Orders for skates and sleigh bells taken some time ago are now being delivered. Business in bolts is not as active as it was, but rivets and burrs are still meeting with a good demand. In spades and shovels an increased demand is to be noted.

BARB WIRE, ETC.—There is nothing doing. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburgh.

ORDINARY FENCE WIRE—Quiet and unchanged. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—Quiet. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—The manufacturers and

jobbers have agreed upon a uniform price for wire nails. It is based upon the Montreal quotations of \$1.95 plus the freight. The local base price for Toronto is \$1.95 per keg; Hamilton, \$1.95; London, \$2. Carload lots are 10c. per keg less. Terms, 4 months, or 3 per cent. off for cash in 30 days. A good trade is reported.

CUT NAILS—Trade has improved. Prices are as before. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—Orders are coming in nicely. Discount, 50 per cent.

HORSESHOES—Trade continues active at \$3.25 f.o.b. Montreal.

SCREWS—Business is fair. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS—Business is not so brisk as it was. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60

and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—Trade continues good, all kinds being called for. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Sisal rope has again advanced. This time the appreciation is ¼c. per lb. Manilla rope is unchanged. We quote as follows: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7½c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8½c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Business is being fairly well maintained. Discounts, 60, 10 and 10, from both stock and factory, with terms 4

months or 3 per cent. off for cash in 30 days

CLOTHES WRINGERS—Quiet and unchanged. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Trade is improving. Quite a number of orders are being received for socket scoops and shovels. Discount, 45 and 2½ per cent.

BUILDING PAPER—Orders are coming in more freely than they were a week ago, and prices are steady. We quote as follows: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.

LEATHER BELTING—Business is much as before. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—Enamel ware is meeting with a fair demand, but there is very little doing in tinware.

CUTLERY—Trade is still good, and a feature to be noted is an increased demand for carvers.

SPORTING GOODS—Business is not as brisk as it was, although there are still a good many sporting goods going out.

HINGES—Business much as before. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CEMENT—The market is still active, dealers being busy with both local and farmers' trade. Prices are unchanged, with the exception of English cement, which has advanced 10c. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 per barrel.

METALS.

Metals are rather more active. A fair business is reported in pig iron, and an increased demand is reported for black iron, galvanized iron, tin plates and Canada plates.

PIG IRON—A fair trade is being done in Hamilton iron. We quote at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

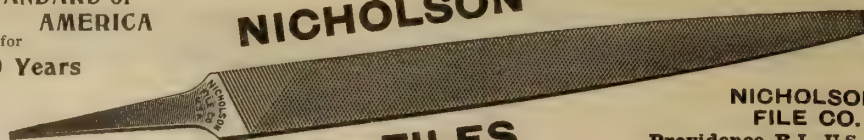
BAR IRON—Trade is fair, quite a number of shipments having been made during the week. We quote base price at \$1.40 in carload lots at Toronto and \$1.50 in smaller quantities.

HOOP AND BAND IRON—Trade is fairly brisk. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$20.

SHEET STEEL—Trade is about the same as last week, with prices steady. We quote:

STANDARD of
for
AMERICA
30 Years

NICHOLSON



FILES

NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1895 . . .

is a rifle made to take the 38-56, 40-65, 40-82, 45-70 and 45-90 cartridges. All lengths and styles, Regular and Take Down.

The barrel and action are made of special steel, strictly guaranteed to highest specifications; ultimate strength, 100,000 pounds to square inch.

Light weight, perfect balance and simple, and the **SOLID TOP and SIDE EJECTION** are always especially valuable in heavy calibres.

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

12 to 16 gauge, \$2.60 to \$2.70 per 100 lbs.; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Has been moving freely during the week. Stocks are on the light side. We quote as follows: 10 to 12 gauge, \$2.60 to \$2.70 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Stocks in hands of local dealers are a little larger than they were, especially in English iron, of which a number of shipments have arrived. Some shipments of American iron are on the point of being unloaded. We quote as follows: Queen's Head (case lots), 16 gauge, 3¼c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¼c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24

gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¼c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—Trade is steady, but without any special feature. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—A few large orders have been received this week, but in general quantities called for are small. We quote pig lead at 4 to 4¼c., and bar, at 4½c.

SHOT—Trade is not as good as it has been, but there is still a fair quantity going out. We quote: Dropped shot, 6c.; chilled do., 6½c.; buckshot, 7c. Discount, 12½ per cent.

SOIL PIPE—The improvement noted last week in the demand has been maintained. Discount, 60 and 10 per cent.

INGOT TIN—Trade is steady, with prices unchanged. No sales of round lots are reported. We quote 16¼ to 16½c. per lb.

INGOT COPPER—Sales have fallen off. Prices, 12 to 12½c. per lb.

SHEATHING COPPER—Trade is a little quieter than it was in all lines. We quote: Sheathing copper, 14½ to 16c. according

to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Enquiries for prices are coming in freely, but orders are only for small lots. We quote: Wrought, ¼ to ¾ inch, 1½c.; ½ inch, \$2.25; ¾ inch, \$2.75; 1 inch, \$3.75; 1¼ inch, \$5; 1½ inch, \$6.45; 2 inch, \$8.75 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

RANGE BOILERS—Business continues good. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—A good trade is reported, but prices have been reduced a little. All-bright is now on the market. We quote: Half-polished, 52-sheet boxes, \$2.25 to \$2.30; ditto, 60-sheet boxes, \$2.35; ditto, 75-sheet boxes, \$2.45; all-bright, \$2.90 per box.

TIN PLATES—Trade is fair. Orders are chiefly for a general line of charcoal. At the same time, however, there is a certain amount of cokes moving. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Orders for small quantities are coming in freely. We quote: 1C, \$6 to \$6.25; 1X, \$7.50.

COIL CHAIN—Trade has improved a little. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET LEAD—Trade has been a good deal better this week. Prices have advanced materially, the ruling quotation now being 5½c. per lb.

SHEET ZINC—Trade remains steady at unchanged prices. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Trade is moderate. We quote:

Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Has been moving a little more freely during the past week. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

Quite a number of orders have been received this week covering a nice assortment of sizes. We quote: First break in 50-foot boxes, \$1.30, and in 100-foot boxes, \$2.50; double diamond, under 25 united inches, \$3.50; terms, 4 months or 3 per cent. 30 days, Toronto, Hamilton and London.

OLD MATERIAL.

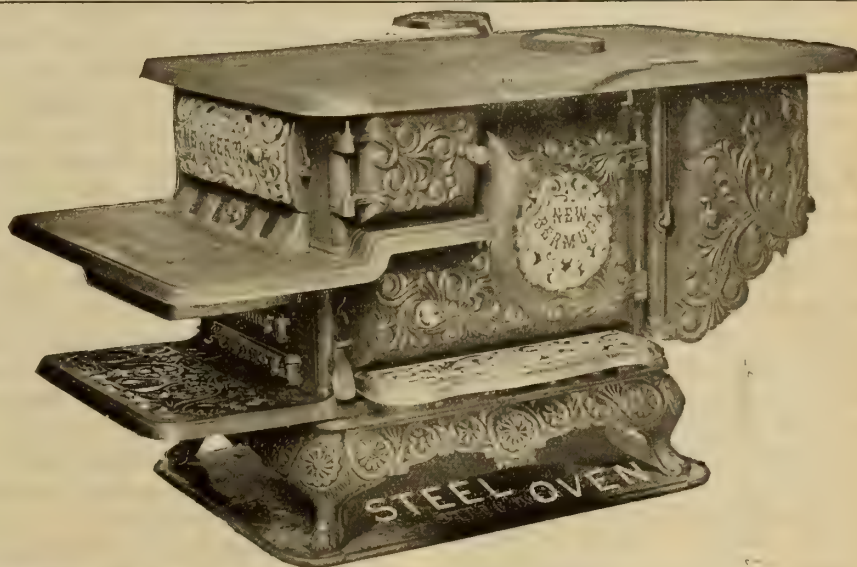
A medium amount of business is being done. Heavy copper, heavy yellow scrap brass and good country mixed rags have advanced in price. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper,

THE SECRET

All successful business men make their money by turning it over fast.

TO DO THIS you must buy only

**Up-to-Date
Quick-Selling Goods**



The attractive appearance of ...

Moore's...

**NEW BERMUDA
NEW FLORIDA**

catch a customer's eye at once

An examination of their many points of SUPERIORITY SELLS THEM.

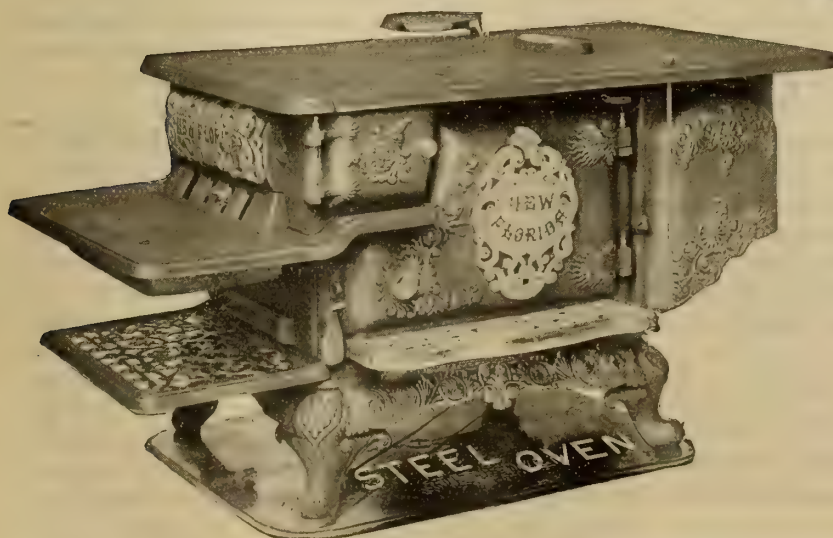
Their durability, economy and perfect operation recommend to you another customer.

These are profitable goods to handle.

THE D. MOORE CO. LIMITED

HAMILTON

Agents for Manitoba and Northwest Territories—Merrick, Anderson & Co., Winnipeg.



7¼c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3¼ to 3½c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

PAINTS AND OILS.

More business and a healthy feeling is the consensus of opinion in the quarters where paint and oil men most do congregate. Trade continues brisk and of a satisfactory nature. Not only is the output much larger than at the same time last year, but collections are better, and there is less tendency amongst the exclusively paint, oil and varnish manufacturers to sell without a fair margin. The expected advance in white lead has not yet come to pass, but the keen advance in turpentine has put buyers on the qui vive, and purchases are of a wider and more generous character. Colors and varnishes for carriage and implement painting are in good request. Ready-mixed paints are quiet. On the other hand, there seems a heavy movement in golden ochre, oxides and chromes, which amply compensates for any falling off in what are termed domestic paints. Putty is in lively demand, but quotations are somewhat easier, which is almost unaccountable, seeing that whiting will soon experience the effect of winter rates of freight, and linseed oil is firmly held. The tendency to cut something, however, seems to be inherent in the disposition of some business men.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—26c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orangeminer, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders

in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 52c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

SEEDS.

As far as jobbing is concerned the seed trade is over. For export, business is fair, many samples of seed offering, but dealers not bidding up to buyers' expectations. Owing to low price in foreign markets, the holders are reluctant about selling. The quality of the alsike crop is rather poor generally. Alsike is quoted at \$3.50 to \$4.50 per bushel, superior grades bringing higher figure. Red clovers, \$3 to \$3.25 per bushel. Timothy, machine threshed, \$1 to \$1.25, and choice unhulled brings a slightly higher figure.

HIDES, SKINS AND WOOL.

HIDES—There is no change in prices here. In Chicago there has been a reaction, prices having recovered from ¼ to ½c. the decline of last week. Quotations are: Cowhides: Dealers pay 8½c. for No. 1, 7½c. for No. 2, and 6½c. for No. 3.

CALFSKINS—Few skins are now offered, the season having about finished. Prices are: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—Local market quiet. Best fresh taken off are quoted at 75 to 85c.; country lots from 75c. down.

WOOL—Foreign wools are still being imported as a substitute for Canadian wool, all of which is disposed of. Pulled wool also are in fair demand, dealers paying 20 to 20½c. for pulled wools.

PETROLEUM, ETC.

Trade is brisk this week. Prices, however, remain unchanged. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

Sheet lead is ¾c. per lb. dearer.

Sisal rope has advanced ¼c. per lb.

English cement has advanced 10c. per barrel.

Canada plates are quoted lower on the local market.

The price of wire nails in Toronto and

the west is now based upon the Montreal figures plus the freight.

H. S. Howland, Sons & Co. are in receipt of another shipment of loaded shells.

UNITED STATES MARKETS.

NEW YORK, Oct. 13, 1897.

PIG TIN—The market was a shade firmer, with very fair business and demand better than for several days. The buying embraced very little that suggested speculation, but gave very good evidence of liberal consumption that leaves sellers with more or less advantage. Business was reported at 13.77½ to 13.80c. f.o.b., and 13.80 to 13.85c. f.o.b. was quoted at the close for five-ton lots.

COPPER—The market remains steady, with quite good business on export account, but only moderate home trade buying. Lake Superior ingot was quoted at 11½ to 11¼c., 10½ to 11½c. for electrolytic and 10¾ to 11c. for casting stock. London cable showed very little change in merchant bars.

PIG LEAD—There was no improvement in the demand, and the market had a rather soft appearance, with common domestic at 4.20c. London cable was £13 11s. 3d. for soft Spanish.

SPELTER—Prices are held very steady at 4 20 to 4.30c. for western, but only fair sales are being made and the demand tame. London cable was £17 13s. 9d. for good merchant brands.

ANTIMONY—The market remains steady with fair business. We quote: 8 to 8½c. for Cookson's; 7¼ to 7¾c. for Hallett's, and 7 to 8½c. for Japanese.

TIN PLATES—Buyers are still operating in a very indifferent way and eastern orders generally are rather small. Competition meanwhile continues keen and prices are rather weak.

IRON AND STEEL—Reports were hardly as cheerful in any department as they have been of late, but a very fair general business takes place, and prices hold steady.

MANITOBA MARKETS.

WINNIPEG, Oct. 12, 1897.

Our long-continued fine weather has broken at last, and slow, cold rain is the order of the day. This will put a check on further building operations this fall. Of course, buildings already under way will be finished. No new ones will be started. To all demands for news the reply is business is good and steady, with absolutely nothing new to report. I notice that in my last report through error I made it read that white lead was advanced to \$2.25; it should have read \$6.25.

WIRE NAILS—The demand in this line is still good. Prices remain on basis of \$2.65 per keg; cut nails, \$2.50 basis.

WROUGHT IRON PIPE—Although an advance has been reported by the manufacturers in the east, prices here have remained unchanged. Business in this article is slow. We quote: $\frac{1}{4}$ inch, \$2.60; $\frac{3}{8}$ inch, \$2.75; $\frac{1}{2}$ inch, \$3; $\frac{3}{4}$ inch, \$4; 1 inch, \$5; $1\frac{1}{4}$ inch, \$7; $1\frac{1}{2}$ inch, \$8.50; 2 inch, \$11.50; over 2 inch, 70 per cent. discount.

BAR IRON—Business in bar iron is fair, with prices at \$2.10 basis.

ROPE—An advance is reported in this article. Sisal is now \$6.50 per 100 lbs. and manilla \$8 per 100 lbs.

The only really lively branch of trade just now is in stovepipes, as the sudden cold snap has hastened the putting-up of stoves.

SUDBURY NICKEL.

THE ownership of the Sudbury nickel mines by a United States syndicate, and the heavy export of nickel to American factories for the manufacture of armor plates for the United States navy, has lately been attracting much attention. The Ironmonger, London, Eng., expresses the hope that an export duty will be placed upon nickel, pointing out that all the maritime powers of the world are strengthening their navies, and there must be a large demand for foreign as well as British manufacture of plate.

The Industrial World, Chicago, gives prominence to an article on the subject, claiming that as there is in the United States a very great amount of money belonging to British capitalists, we in Canada should allow the United States owners of this mine to export the product of the mine as they see fit.

The argument of The Industrial World is a weak one, for, in the first place, there is a great difference between a capitalist investing his money in an enterprise which is most likely to add to the wealth of the nation and a capitalist investing his money in extracting the natural wealth from a country.

Besides this, there lies the fact that Imperial interests are at stake. Bradstreet's says: "An English critic announces that the Sudbury deposits of nickel are contributing to the strength of the armor plates of the United States navy, the most invulnerable in the world, and that the Bethlehem and Carnegie concerns are furnishing Canadian nickel steel armor for the Russian navy. The adoption of the same material for naval armor by Great Britain naturally raises the question as to what this all means to Canada, and what is the significance of an American ownership of these Canadian nickel deposits."

Inasmuch as these nickel mines are benefiting the United States navy and the Russian navy in the manufacture of armor

plates, the matter undoubtedly assumes national importance, and it is but just that legislation should be enacted on the principle that a nation has first right to all the natural resources within its boundaries.

PERSONAL MENTION.

Mr. Peleg Howland, of H. S. Howland, Sons & Co., accompanied by Mrs. Howland, is making a tour of some of the cities in the United States. Before returning to Toronto, Mr. and Mrs. Howland will spend a short time at Sheboygan, Mich., the home of Mrs. Howland's parents.

The daily papers announce that Mr. T. S. Hobbs, of the Hobbs Hardware Co., who at present represents London in the Local Legislature, will not be a candidate at the ensuing general election.

Mr. Fred. Wilkins, of Wilkins & Co., Toronto, attended the Streetsville Fair this week, and reports a very good exhibit of carriage hardware. No other lines of hardware were on exhibition, but it is intended in future years to introduce them into competition.

Mr. John W. McVean, of Messrs. McVean & McVean, Dresden, one of **HARDWARE AND METAL'S** first subscribers, was in Toronto this week, accompanied by Mrs. McVean. Mr. McVean confirms the impression that business is satisfactory.

Mr. J. Taylor Webb, of the Thomas Davidson Manufacturing Co., Limited, who has been unwell for several weeks, is again on the road, although he does not look his accustomed self, having lost 30 pounds during his illness. Mr. E. Goodwill, of Montreal, has relieved Mr. Webb of some of the points in his western territory.

Mr. Guy H. Simpson, with the Mechanics' Supply Co. of Quebec, was in New York last week.

AN INVENTIVE HARDWAREMAN.

A. E. White, hardware merchant, Dutton, Ont., has recently perfected a door knob which has been the result of careful thought for a number of years with him. Every hardwareman and builder knows the difficulty as well as the loss of time entailed in adjusting door knobs in mortice and rim locks, so as to keep the knob from working loose. Mr. White's invention is an ingenious device and overcomes this difficulty entirely by the use of a nut which screws on to a shank threaded right. The greatest difficulty with which he had to contend was to arrange to have this nut screw on in same manner as the handle, and when adjusted to its point to stay in that position. Had it been possible to make a right or left thread on the same shank this would have been a simple matter, but the adjustment would not

have been as complete. Finally the idea struck Mr. White that a washer with a square hold would answer the purpose, and on trying the same found it to be the case. Mr. White is at present manufacturing this patent door knob for himself and for the jobbing trade. The knob has been patented in both Canada and the United States.

EXPANDING TRADE DEMANDED IT.

The Thomas Davidson Manufacturing Co., Limited, of Montreal, who recently purchased the site of D. A. McCaskill & Co.'s old building which adjoined their present plant, are erecting a new building thereon. It will be five stories with basement, will be 210 feet deep by 80 feet wide, and will give a floor space of two acres and a half. The erection of the building has been found necessary in order to keep up with the company's increasing enamel ware trade.

SHIP-BUILDING IN TORONTO.

The Bertram Engine Works Co., Limited, have secured a contract for the building of three large steel tow-barges to be used on the St. Lawrence route by the Prescott Elevator Co. The engine company will launch the last of four barges for the same company on Wednesday next. They are now moving their shipyard to the dock where the Corona was launched, having leased it for a long term of years, so as to be in a position to undertake large contracts for ship-building.

Many merchants instruct their employees to pay particularly careful attention to young children who may be sent to the store. The little ones are very sensitive and will notice the cheerful, smiling face and the apparent anxiety to please and wait on them, and they are glad to go to such a store again.

Daniel Turner, Sarnia, has a "perpetual motion" machine in his jewelry store window. He has the motive power—a clock—secreted behind the perpetual-motion machine in such a way that few can see the trick.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales
made and repaired.

Write for Catalogue.



THE COST OF RETAILING.

A MUCH-DEBATED subject, the cost of doing business in a general store, has been brought to the front by *The Bulletin and Trade*, of Minneapolis. It says:

"A subscriber from Litchfield, Minn., sends to *The Bulletin and Trade* the following query:

"What do you consider as the minimum percentage of expense for selling goods in a general country store, such as store rent, living expenses of proprietor, clerk hire, taxes and insurance, and every incidental necessary to conduct business? How do expenses of retailing goods in the city compare with those in the country?"

"The answer to these questions can be nothing more definite than an estimate formed through the judgment of men who have been in the business and have estimated their own expenses in terms of a percentage on their goods. Several merchants in this city have been interviewed regarding this question, and several answers have been received. The result as obtained from these merchants is: Ten per cent. in the city will give the retail merchant, if he is exceedingly economical in his living and careful about his store, a bare living, with nothing to lay up as a profit over his living. This reckons the movement of the goods laid down at the door of the store to the homes of the consumers. This also reckons on a fair total of business.

"A merchant who has run a store on the 10 per cent. plan says it cannot be done, except in very good times, with more than the average of trade. When hard times come, a store run on such a per cent. is almost sure to fail. He says he would not think of doing business on less than 20 per cent. on the average goods he sells. The merchants seen on this question say they believe that a country store can be run at less expense than the city store. One merchant thinks that the country storekeeper can do as well on 7½ per cent. as the city storekeeper can on 10 per cent. The taxes, clerk hire and living of proprietor must be more in the city than in the country. Clerks of good ability cost \$50 a month in the city. They can be hired for considerably less in the country. Insurance is higher in the country, but taxes are probably double in the city what they are in the average country town.

"In any case, the estimate must depend in a great measure on the amount of goods sold during the year. There are stores in the country that sell no more than \$5,000 worth of goods in a year. The expenses of such a store would have to be painfully small to live on 10 per cent. On the other

hand, the department store might be able to come out with a large margin on less than 10 per cent."

It seems to us that *The Bulletin and Trade* has not erred through extravagance of statement in fixing the percentage of cost of doing business, and we think the higher figures mentioned will commend themselves to the most careful investigator. But the point upon which the merchants' attention should be fixed, in a perusal of the foregoing article, is the relation of cost to sales. The man who can only sell \$20,000 worth of goods with the same expense for rent, clerk hire, etc., as a rival incurs who sells \$25,000 worth annually, will find that his percentage of cost is much larger than his more successful competitor will find his percentage to be.

If a merchant is in doubt whether it is costing him too much to sell goods, let him push the sales a bit, and keep on doing so whenever any doubts arise. If he does this he will never be alarmed by discovering that the cost of doing business on his plan is too heavy.—*Merchants' Review*.

CREDITS AND COLLECTIONS.

THE following appeared in a price list sent out by a St. Louis wholesale firm, and contains much wisdom:

Perhaps the most perplexing part of every business is that department which regulates credits and collections. The difficulties which surround the credit man of a grocery house are simply enormous. He has to contend not only with troubles that come to him from those who want facilities, favors and extensions, but he is burdened by adverse criticism from those in the sales department and who should of right know better.

Many merchants do not seem to realize that a man's credit depends largely on the promptness with which he meets his bills. Merchants will sooner or later have to come to understand that their lines of credit are regulated, not by their intentions, but by their means, their methods and their promptness. It will not do to put on airs with those from whom we wish to buy goods on credit. It will not do for salesmen to misrepresent; to report that their customers discount, when in fact they do not discount. The credit man of a jobbing house is a matter-of-fact man. He takes nothing for granted; he analyzes every statement that is made to him. He, like everyone else, can be imposed on once or twice, but in the long run he learns to place a just estimate on the value of statements made to him by

salesmen, by merchants, by mercantile agencies and by all with whom he comes in contact regularly. Excuses may go occasionally, but they will not do as a rule. It is unjust to the close buyer to have the long-winded man buy goods as cheap as the one who meets his bills promptly. In a business like ours in which the selling prices of many goods are limited, in which all pay the same price, it is, as above stated, an injustice to the prompt man to sell goods to the long-winded man at the same price.

There is an element of risk in every account. He who discounts eliminates that element of risk and should buy for less money. He who pays promptly eliminates another portion of the risk, and should buy at close prices. The dealer who is habitually and chronically slow; who is good only in his own estimation; who thinks he can do as he pleases about paying, and still maintain his standing, is mistaken, and will sooner or later be forced to realize the position which he occupies in the mercantile community.

Selling goods on credit is the source of many evils with the retail merchants. The sooner they realize that they must cut down the lines of those of their customers who do not pay promptly, the sooner they will be abreast of the times and in line for promotion in the great struggle for prosperity.

We have made it a rule to collect for our bills when they mature, and we have neither the desire nor the means to do business on any other line. We do not wish to do a carrying business. We recognize that all merchants may be occasionally slow, but we do not wish to carry those that are chronically slow. Our salesmen know our wishes and our ideas, and those who act on them have no trouble in securing the trade of prompt-paying, responsible merchants. Those who depend on empty promises find their orders turned down, their trade dissatisfied, their sales decreasing, and their business unpleasant. We have no apologies to make when we ask for our money when it is due. Our customers have a right to stand for everything that we agree to do for them; we, on the other hand, have the moral, the legal and the commercial right to ask of them to fulfil their part of the agreement and to pay for their goods as they mature.

CATALOGUES, BOOKLETS, ETC.

The catalogue of Smith & Egge Manufacturing Co., Bridgeport, Conn., is before us. It is a well-printed and fully-illustrated book of 40 pages, bound in a neat, brown linen cover, and gives a full account and prices of their goods, hardware, plumbers' and bicycle specialties. They have put a new line of belt punches on the market, of the revolving style, with either screw or drive tubes, and with either four tubes or six tubes on the punch.

HARDWARE DEALERS' MAGAZINE

Largest Circulation in its field in the World

One Dollar
a Year.

D. T. MALLETT, Publisher
271 Broadway, New York

Specimen
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WROUGHT IRON PIPE DEARER.

A MEETING of the Wrought Iron Pipe and Tube Manufacturers' Association was held in the Monongahela House, Pittsburg. There was quite a large representation of the manufacturers present, the following concerns being represented in person: Pennsylvania Tube Works, Pittsburg; Spang, Chalfant & Co., Pittsburg; National Tube Works Company, McKeesport, Pa.; American Tube & Iron Company, Youngstown, Ohio, and Middletown, Pa.; Morris Tasker & Co., Philadelphia; Riverside Iron Works, Wheeling, W. Va.; A. M. Byers & Co., Pittsburg; Oil City Tube Company, Oil City, Pa., and Ohio Tube Company, Warren, Ohio. Frank J. Hearne, of Riverside Iron Works, was president and Joseph Brown, of Pittsburg, secretary. The meeting was called for the purpose of considering fully the present condition of the pipe and tube trade and to consider the advisability of making an advance in prices. After a careful and thorough discussion of the situation it was decided to make a slight advance in prices and the base discounts were changed as follows: Butt weld black, 72 per cent. discount; butt weld galvanized, 67 per cent.; lap weld black, 78 per cent.; lap weld galvanized, 70 per cent. The above discounts are subject to a further discount of 10 and 5 per cent. for carloads and 10 and 2½ per cent. in less than car loads. On carload lots there is a freight allowance, but in less than carload lots there is no freight allowance. The discount on screw and socket casings was put at 65 per cent. and on inserted joint casing at 60 per cent. The present condition of the pipe and tube trade is referred to by the manufacturers as very satisfactory, there being quite a good demand and the mills very busily employed. The principal reasons given for the advance in prices are the higher prices of iron and steel skelp and the fact that a number of the concerns have recently advanced wages 10 per cent., and others will probably do so in the near future. —Iron Age.

WIRE NAIL CONSOLIDATION.

A Chicago despatch says: Ex-Judge Gary, one of the largest holders of stock in the Consolidated Wire Co., says: "It is true that we have a plan on foot to combine a number, or rather a majority, of the barb wire and wire nail mills of the country into one concern. The new company which we hope to organize will buy the mills outright, giving in exchange either cash or stock. We have reason to think that the negotiations will prove successful. Mr. Gates, as president, and I as counsel for the Illinois Steel Co., were in New York lately on important business connected with that company. We did have some talks with certain barb wire and wire nail makers. As to financing the new company, we have the assurance of some of the largest moneyed men in New York that there will be no trouble in that direction. The capital of the new company will be at least \$50,000,000, perhaps \$60,000,000."

H. Boker & Co.'s

FAMOUS

CUTLERY



In large varieties

PEN KNIVES SCISSORS RAZORS

RICE LEWIS & SON
TORONTO

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

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Montreal or Toronto

INSURE YOUR LIFE IN THE CONFEDERATION LIFE ASSOCIATION

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only--that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE—TORONTO.

W. C. MACDONALD,

Actuary.

J. K. MACDONALD,

Managing Director.



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern **STOVE POLISH**

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

THE TREASURES OF A SCRAP PILE.

A SCRAP PILE, if properly exploited, is not without its latent treasures. This has been frequently demonstrated, and The Railway Age calls attention to the fact of the Baltimore and Ohio Railroad erecting a pile driver from old cast-away iron. It says:

"The particular scrap pile from which the pile driver was evolved was recently enriched by the addition of the remains of the old bridge over the Muskingum River at Zanesville, which was taken down and replaced by one of modern design. In this increment was seen the opportunity for building a much-needed pile driver, and the order was accordingly issued. Not a single dollar's worth of new material was ordered, except the side sills of the platform, which were particularly heavy, and the hoisting engine and boiler. The castings required were made from the cast-iron columns of the old bridge, with the addition of enough pig iron to insure a good quality of metal. The trucks were a pair of second-hand ones formerly used under a low flat car, put in good condition. The platform was built after style of a flat car, heavily braced. It is 40 feet long over the end sills and is supported by 10 longitudinal sills. The centre and intermediate sills are 5 by 9 inches, and the side sills are composed of two double sills 6 by 12 inches, spaced about 1 inch apart and trussed, with 1-inch rods on 6-inch queen posts. The whole floor is well trussed with 1 1/4-inch rods on 12-inch queen posts, fastened to 8-inch tie timbers. Underneath is a capacious tool box. The body and truck bolsters are of the combination type with six flitch plates 3/4-inch thick, both bolsters being extended beyond the body for convenience in blocking and steadying the machine while at work. The hammer weighs 2,800 pounds, and has a total fall of 38 feet. The superstructure is pivoted on a carriage that is made to travel the full length of the platform by power, so that the driver can be turned in a complete circle at any point on the platform by

power from the engine. A cabin of substantial design framed with angle-iron protects the engine and operator from the weather. The leads can be taken in and stowed in a longitudinal position for transportation by means of a jointed brace, using the hammer as a counterweight."

CHANGES AMONG HARDWAREMEN.

MORTON & CHRISTIE, of Windsor, Ont., having found the store which they have been occupying inadequate, have secured much larger premises in the Opera Block. The new store is spacious, having a 30 feet frontage, with a depth of 100 feet. In addition to this they have secured a nice workshop and iron house in the rear. They now have an up-to-date hardwareman's premises.

White Bros., Collingwood, have removed from the stand which they formerly occupied, opposite the Grand Central Hotel, to the warerooms at one time occupied as a furniture store. This building is much larger than the old one, and is constructed on more modern principles. It is to be hoped that increased trade will come to White Bros. as a reward for their enterprise.

A. B. Noble, who for twenty years carried on business in Shelburne as a hardwareman, and who recently sold out to Hillhouse & Jelly, has entered into partnership with J. D. Neelon, formerly of Thorold, and has opened up a hardware and enamel ware business in St. Catharines. The new firm has a nice store in the heart of the Garden City well stocked with new goods, and it is up-to-date in every respect.

Harper & Lee, of Goderich, who carried on an extensive business in stoves, tinware and plumbing, have dissolved partnership. The business will be continued by Mr. Lee, who has taken in a Mr. Shephard as partner, the firm name becoming Lee & Shephard. Mr. Harper, who had charge of the plumbing department of the firm of Harper & Lee, is going into the restaurant business. "He will now," said a friend of his, "engage in serving up joints instead of wiping joints."

USE OF GAS FUEL.

In concluding his article in The Engineering Magazine on the extending use of gas in industrial operations, Mr. F. H. Shelton says:

Enough has been said to show that gas, whether of one kind or another, is used most extensively for industrial purposes, and that its use is evidently a factor of the highest importance to progressive manufacturers alive to the necessity of securing the greatest economy and all possible advantages in their fuel operations. And yet, extensively as it is used, and constantly increasing as its uses are, it is the opinion of the writer that the number of plants in which gas is so used does not constitute one-quarter of the number wherein it can, and ultimately will, be adopted to advantage. Whether it should be adopted or not by manufacturers not yet using it, need not be a matter of vague opinion; it is a matter susceptible of proof from practically exact figures. Hard fuel for any given heating operation now costs a certain amount. A given net amount of heating effect is secured from it, which can be closely calculated. The comparative cost of an equivalent net amount of heat secured from any one of the several commercial artificial gases mentioned is a matter of comparatively easy figuring to anyone familiar with the nature of the work, the cost of the gas or gas-making materials and the relative heating values and characteristics of the several gases. A manufacturer paying large sums per year for hard fuel who has not employed an expert to determine whether illuminating, blue, water, oil or producer gas can advantageously displace that hard fuel is certainly running a large risk of conducting his business under a handicap of unnecessary fuel expense, compared with the possible lower cost of gas. In a surprising number of cases the figures will show that economy can be secured by intelligently substituting one of the gases mentioned, to say nothing of an increasing amount of product, a better grade of work and other incidental advantages almost invariably secured.

METEORIC IRON.

NATIVE meteoric iron, according to Prof. Ledebur, of Freiberg, is too costly to be available for practical use. The market prices are about 15 cents per gram for ordinary qualities, and from 35 cents to 60 cents per gram for the rarer qualities, and from \$1 to \$1.75 per gram the fall of which has been observed. Still it is not extremely rare, at least not in museums. The museum at Vienna has 1,033 kilograms of it, of specimens that were found in 145 different places; the collection of the University of Berlin is rich in specimens; the Natural History Museum at Paris has a considerable quantity of it; and the British Museum has 3,600 kilograms in a single block. The largest piece in any collection is one weighing 5,000 kilograms, from Bemnago, Bahia, in the museum of Rio de Janeiro. It is believed to be a fragment of a meteor of 9,000 kilograms which was discovered in 1784. A mass described by Humboldt was estimated to weigh from 15,000 to 20,000 kilograms. Evidence is adduced by Herr Otto Vogel, of Dusseldorf, to show that meteoric or nickel iron is found over most of the world and has been worked in the most recent times; and that it was also worked and used in the middle ages and in remote antiquity. The negroes on the Senegal river were found working it by Buchner; the Namaquas of South Africa made weapons from it, and the Indians of Islahuaca manufactured agricultural implements and other tools from it as early as 1784. Capt. Ross in 1819 found the Eskimos of Greenland using meteoric iron in making lines and other tools; and there is a knife blade of this iron in the Natural History Museum at Vienna, where is also preserved an arrow-head of it from Madagascar. The author suggests that it may easily be assumed that the first iron that was ever wrought was cosmic iron—that is to say, an iron derived from another world. "On such foundations," says Mehrtens, "the uncultured inhabitants of our earth may first have tried their skill out of curiosity, and perhaps by chance have discovered the properties of iron."

A POPULAR GUN.

The game season being open, sportsmen are eagerly taking advantage of the good weather, and the crack of gun, and whirr of partridge are heard in the land. The Iver Johnson's Arms & Cycle Works, of Fitchburg, Mass., enjoy the sport, for their fire arms, like their cycles, are immensely popular, and their "Iver Johnson" shot gun is reckoned among the finest of the single guns. The firm report an exceedingly heavy demand for their goods.

**Bridled
Brushes**

The name **Boeckh** guarantees them.

Brushes
Brooms
Woodenware

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

Every
Flat Bridled Brush
we make for Painters
bears our name and
trade mark stamped
on the handle.

SEND US YOUR ORDERS FOR

Window Glass Plate Glass Leaded Glass

AND GLASS OF EVERY KIND

Toronto Plate Glass Importing Co.

HILL & RUTHERFORD

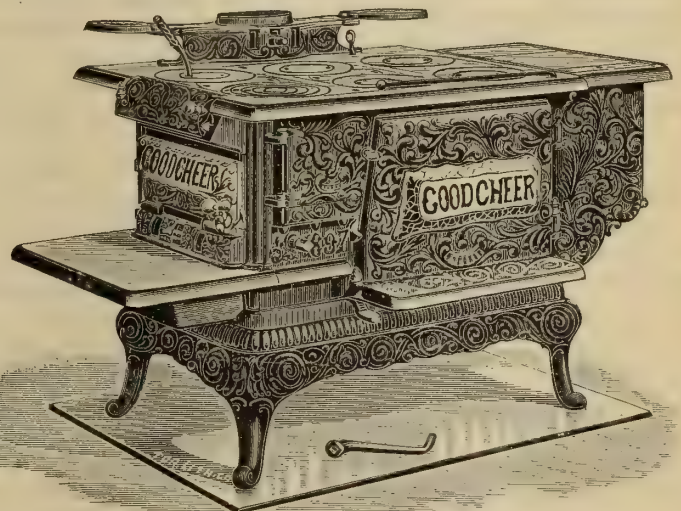
135 and 137
Victoria St.

TORONTO

**Good
Cheer
Ranges**

**LARGE
STEEL
OVENS**

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

A MEETING of the creditors of H. J. Wilson, tinsmith, Niagara, Ont., was held on the 11th inst. in Hamilton.

J. P. Pothier, general merchant, Batiscan, Que., has assigned.

Henri Garon, general merchant, Causapscal, Que., has assigned.

D. A. Bishop & Co., crockery merchants, Truro, N.S., have assigned.

H. L. Brown, bicycle dealer, Clinton, Ont., has assigned to J. P. Tisdale.

George Giller, general merchant, Berlin, Ont., has assigned to Charles C. Scott.

Edward Murphy, carriage builder, St. John, N.B., has called a meeting of creditors.

Gonzague Gagnon, general merchant, Thurso, Que., has assigned to Kent & Turcotte.

Cyrille Fortier, general merchant, Lake Megantic, Que., has compromised at 50c. on the dollar.

An assignment has been demanded of Drouin & Trudel, general merchants, Abenakis, Que.

C. B. Parker, general merchant, Cole's Island, N.B., is offering to compromise at 25c. on the dollar.

A. Dury, general merchant, St. Jovite, Que., has assigned to Lamache & Benoit, and the stock has been sold at 50c. on the dollar.

PARTNERSHIPS FORMED AND DISSOLVED.

Grenon & Ouellette, stor.keepers, Sudbury, have dissolved.

Deslongchamps & Co., plasterers, Montreal, have dissolved partnership.

McDonald & Mather, general merchants, Westville, N.S., have dissolved partnership.

Moore & Gardner, general merchants, Hawkestone, Ont., have dissolved; George Moore to continue.

Partnership has been registered in connection with the Montreal Hardware Manufacturing Co., Montreal.

Wm. Bremner & Son, plasterers, Montreal, have dissolved, Henry Bremner to continue under the old style.

SALES MADE AND PENDING.

The book debts of R. Stafford, general merchant, Joliette, Que., have been sold.

W. J. Cline, saw mill owner, Victoria, B.C., has sold out to James Leigh & Sons.

Wm. H. Scott, general merchant, Shawbridge, Que., has sold out to Henderson & Bell.

The business of James McDonald, blacksmith, Teeswater, Ont., is advertised for sale.

Laing & Meharry (estate of) general merchants, Port Perry, Ont., advertise their

auction sale of stock to be on the 19th inst., instead of the 20th as previously advertised.

H. J. Lehman, general merchant, West Montrose, Ont., is advertising his business for sale.

The business of late G. H. Falconer, general merchant, Streetsville, Ont., is advertised for sale.

The balance of the assets of the Thos. E. Howard Co., dealers in brass goods, Montreal, have been sold.

The assets of George Audet, general merchant, Les Eboulements, Que., were sold on the 11th inst. at 46¼c. on the dollar.

The stock of Laing & Meharry (estate of), hardware merchants, Port Perry, Ont., is advertised to be sold by auction on the 20th inst.

E. A. Baker & Co., hardware, groceries and grain dealers, Moose Jaw, N.W.T., have sold their grain business to T. D. Baker.

CHANGES.

W. M. Butler & Co. have started a hardware business in Arnprior, Ont.

Cyrian Leonard has started business as tinsmith in L'Annonciation, Que.

Octave Cidillot has commenced business as a carriage maker in Labelle, Que.

Wilfrid Touchette has opened up a general store in Rapides De L'Original, Que.

D. Waters, blacksmith, Stratford, Ont., has been succeeded by Robert Taylor.

H. W. Legare has commenced business as a general merchant in Labelle, Que.

Joseph Longpre has commenced business as a general merchant in St. Jovite, Que.

The Booth Waggon Co. of Ontario, Limited, Toronto, have obtained charter.

Joseph Trudeau has opened up a blacksmith shop in Rapides De L'Original, Que.

Napoleon Denis has re-commenced business as general merchant in L'Annonciation, Que.

The Kingston Elevator and Transit Co., Limited, has obtained charter of incorporation.

Wm. Loughton, general merchant, Bothwell, Ont., has been succeeded by G. H. Walker.

Stephen McDonald has commenced business as a blacksmith at McKinnon's Corners, N.S.

Shaw & Woolever have been succeeded in the hardware business in Wallaceburg, Ont., by Woolever & Lendon.

FIRES.

Alex. McLellan, saw mill owner, Casselman, was burnt out; partially insured.

The general store of J. C. Merkley, Casselman, has been burned out; no insurance.

J. N. Coupal, saw and grist mill owner; J. E. Guertin, foundry owner, etc.; J. Montpetit, carriage maker, and Jos. A. Riddell,

tinsmith, were all burnt out in the South Casselman conflagration last week. All but J. Montpetit are partially insured.

Joseph Benoit, Hurtubise & Co., and Pilon Bros., all general merchants, were burned out in South Casselman last week. All are partially insured.

The Edwards Trading Co., Limited, saw mill owners; D. B. McDonnell, saw mill owner; John O'Callaghan, carriage maker, and G. H. Perley, shingle mill owner, were burnt out in the South Indian fire last week. The Edwards company is partially insured.

HIS REPORT A GOODLY ONE.

Mr. T. H. Newman, of Caverhill, Learmont & Co., Montreal, has just returned from an extended trip through Western Canada and the United States.

Mr. Newman considers the prospects in Manitoba and the Northwest most encouraging indeed. He says that the general buoyancy of values has the usual effect of putting traders in a cheerful humor, and as the general conditions are favorable a large and healthy volume of business can safely be looked for. The fact that business is on the turn in the United States is another encouraging circumstance.

Mr. Newman visited Chicago and several other centres, and found merchants there very sanguine of good times.

TRADE CHAT.

An electric power company has been formed in Strathroy.

The Verity Plow Co. of Brantford propose building a new factory, to cost \$40,000.

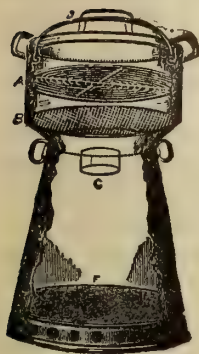
The Stacey Hardware Manufacturing Co., St. Thomas, have the contract to put the metal roof on Robertson, Lindsay & Wilcox's new store.

A party of local men contemplate building a new pleasure steamer to ply on the Red River. The boat will be of light draft, and designed for the exclusive accommodation of excursion parties.—Free Press, Winnipeg.

WILL BRING BACK A GOLD BRICK.

Mr. H. N. Kittson, of the financial end of Messrs. W. H. Gillard & Co., wholesale grocers, Hamilton, passed through Toronto Tuesday last. Mr. Kittson is the secretary-treasurer of the now well-known Saw-Bill Lake Gold Mining Co., and is on his way to the mine, and will bring back to Hamilton the result of the stamp mill's first fifteen days' run. The Saw Bill Company was floated and successfully managed under the supervision of Mr. Kittson and Mr. Beckett, of Gillard & Co., and the shareholders in particular and the country in general owe a great deal to the integrity, enthusiasm and business ability of these gentlemen.

THE "KRASEL"

Double
Ash Sifter

P. R. KRASEL

Patentee and Manufacturer

2529 St. Catherine St.

MONTREAL

Write for prices and samples

Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high
11 inches wide
17 inches deep

2 SIZES WITH OVEN
2 SIZES WITHOUT OVEN

Manufactured by

Burrow, Stewart & Milne
HAMILTON

Agents for Manitoba and Western Territories, Merrick, Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and P. E. Island, W. L. Haldimand & Son, Montreal.

A CURIOSITY FROM AFRICA.

MR. J. L. WATT, of Watt & Scott, the other day received by parcel post from a brother in British East Africa, a curiosity in the shape of an elephant's foot. The flesh and bone has been removed, leaving only the skin and horny substance which served the late Mr. Elephant with toes. The skin is about quarter of an inch thick. Mr. Watt proposes to use it as a rest for a fern pot.

"I should suppose the bottom of the foot is about twelve inches across," I remarked as I picked up the curiosity to examine it.

"Yes, I suppose it is: it's a foot you know," was the pun Mr. Watt worked off as a reply.

"But isn't it a four foot," remarked another punster, who, by the way, is also a broker.

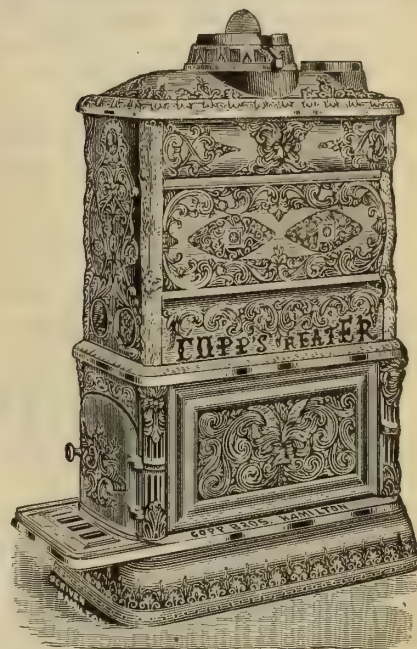
Then the toes of the foot, which had been the cause of the puns, worked as if with irritation, and there was no more punning.

U. S. IMPORTS OF BRITISH TIN PLATES.

Last month The American Manufacturer stated that the British exports of tin plate to the United States for July were the lowest on record, but those for August are considerably lower. Its recent cable message states that "the total amount of British tin plate exported to the United States during the month of August was 3,526 tons. Compared with the record for the corresponding month in 1896, this shows a reduction of almost 60 per cent. The lowest previous figures were those of July, but the August record is 35.65 per cent. lower. In August, 1895, the British makers sent over 23,531 tons. In comparison with this the exports of last month show a reduction of more than 86 per cent. The exports of last month compared with the highest during the past five years, which was in April, 1893, shows a drop of more than 88 per cent."

A RESULT OF THE DINGLEY LAW.

Cutlery and hardware seem to have suffered as much as any other English manufactures in consequence of the new American tariff. The average monthly shipments of these products from Great Britain to the United States during the first seven months of the present year exceeded in value £17,000. For August the shipments reached only £3,104. For August, 1896, they were £14,142. "The loss of our United States trade, which has, from the most important of our markets, next to Australia, become one of the most insignificant," says Hardware, Metals and Machinery, of London, "tells heavily upon business in hardware and cutlery, and fully accounts for the reduction of values for last month, as compared with August, 1896."

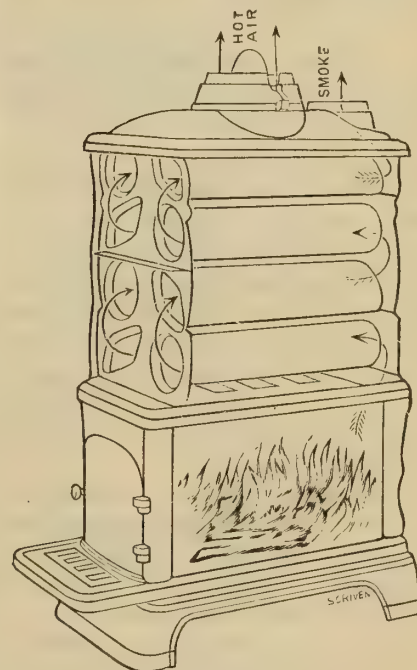
COPP'S
WARRIOR HEATER

Our Copp Heater is a marvelous success, and has no equal.

It will render a larger increase of trade, as well as greater profit to the dealer, than any other stove made.

Its capacity is from 15 to 20 thousand cubic feet, and obtained with small consumption of fuel.

We shall be pleased to give further information upon enquiry.



Sectional Cut.

This cut shows the manner of conducting the combustion from fire-box to exit, after travelling over 14 feet. Direct draft dampers are provided.

The cold air passing in under the centre ring is forced in contact with the peculiarly shaped steel tubes, thereby becoming intensely heated.

One size burning 34 inch wood.

MANUFACTURED BY

THE COPP BROS. CO.

...Limited.

HAMILTON, ONT.

A SUCCESSFUL MAN'S CAREER.

THE merchant prince leaned back in his revolving office chair and smiled cheerfully at a newspaper man. The former was rotund and complacent, the latter symmetrical, but weary. He had for years been ennuied by the sameness of things.

"So you want a brief history of my life," said the merchant prince. "Well, there isn't very much to tell."

"About the usual thing, I suppose," suggested the reporter, sorrowfully.

"Just about. You see, I was born in the country, and until I was sixteen I went to school——"

"I know," interrupted the reporter. "It was a little red schoolhouse with green blinds. It nestled in the shadow of the hills."

"It didn't nestle for a cent," said the millionaire; "it was on the top of a hill, and it was a five-storey brick building. When I was sixteen I left school——"

"To take care of your family—yes, of course, I understand," said the reporter.

"I was expelled for kissing the head teacher's pretty daughter," went on the rich man, ignoring the interruption.

"After that I went to another school, where I remained until I was twenty, when I——"

"Embarked in your business career and began to lay the foundation for your great fortune," almost begged the reporter.

"No, I went to college."

"You did the four years' course in three years," pleaded the newspaper man.

"It took me six. You see, I was suspended three or four times for getting drunk, and I got into two or three other pretty nasty scrapes, but I finally managed to pull through. After I left college I went home."

"Your father was growing old and needed your help in his declining years," implored the writer.

"Not much he didn't. He told me I was no good at all and sent me to Europe for three years. My, my! but I did have good times there! While I was in Europe the old man died and I came home again."

"At last," murmured the reporter to himself. Aloud he said: "And took the burden of the family and business on your young shoulders."

"Well, you might call it that, I suppose. There wasn't any burden, because father left us comfortably off. Anyhow, I came to New York and managed the business."

"You toiled early and late," suggested the reporter.

"I toiled not at all. I had competent employes, and the business practically

ran itself. All went along quietly until Black Friday, when——"

"You lost every dollar you had in the world," said the reporter hopefully.

"I was on the right side of the market and made nearly two millions. Then I went back to my former home."

"Your aged mother needed your loving care"

"I went home to be present at mother's second marriage," said the banker stiffly. "There I met——"

"Ah, yes, of course. All these years you had been haunted by the face of some childhood's friend."

"I met Miss Gertie MacMillions. We fell in love at first sight and were married six months later. I have always been very successful. Is there any other question you would like to ask?"—San Francisco Examiner.

GOLD SUPPLY INCREASING.

The estimate of the production of gold throughout the world for 1897 will be between \$235,000,000 and \$240,000,000, an increase of more than \$30,000,000 over the previous year. The countries producing most largely are the United States, with a product of \$60,000,000; South Africa and Australia, with over \$50,000,000 each; Russia, with \$30,000,000. Mexico will produce \$9,000,000 and British India \$5,000,000. The \$30,000,000 increase is spread over the different countries.

As the Klondike figures are altogether a matter of speculation, the returns for the Dominion of Canada cannot be given. In 1895 Canada produced only \$1,910,900. These figures, which are taken from the report of the Bureau of Industries, do not give the production of gold in Canada for 1896, which was \$2,810,206 worth.

It is probable that another year will see a further increase in the world's output of nearly \$20,000,000. These figures are very

large compared with the output of a few years ago, the five years ending with 1885 averaging \$99,116,000, increasing in 1890 to \$118,848,700. The combined product of gold averaged \$209,700,000 in the five years ending 1885, so that the output of gold is now greater than the combined output of gold and silver 12 years ago. Of the total gold product, not over \$65,000,000 per year is used for art purposes, so the supply available for monetary purposes will be \$170,000,000. The deduction is drawn that as the production of gold has increased to that of the former production of gold and silver, and as the demand has not so increased, gold is fully equal to all currency demands.

USES OF STEEL.

We ride to New York on a steel road over steel bridges, stay at a steel frame hotel, take a steel steamship for England, a country whose civilization rests on steel. Our farmers use steel ploughs, our merchants steel safes, our manufacturers steel boilers and steel water wheels, our carpenters steel nails, and our soldiers fire steel guns from behind steel shields. Steel nails are so cheap that if a carpenter drops one it is not worth his while to pick it up, for 10 seconds of his time is worth more than the nail. They are so cheap that it pays to lose them.—Hartford Courant.

A NOVEL HARDWARE DISPLAY.

A very novel window display was recently made by a hardware concern in one of the western States. The following sign was printed on a large blackboard, with the articles themselves taking the place of words in quotations: "A few 'plane' words of advice. 'Brace' up, 'file' in, and 'nail' our snap bargains. We want 'awl' to know that you never 'saw' any 'grater' bargains in our 'line,' for our 'rule' is to 'hammer' our prices down to hard 'pan' and divide with you, and we don't 'monkey' a 'bit.' Do you 'catch' on?"

Recd Oct 25/97 Messrs Pres to McLean

GLOBE FILES AND RASPS

Manufactured from Superior Quality Cast Steel.

We warrant our goods equal to the best imported.

THE GLOBE FILE MFG. CO.

PORT HOPE, ONT.

Baylis Manufacturing Co.

16 to 30 Nazareth Street. MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Javanned, Nickel, Silver and Bronze Plated and Real Bronze.

Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

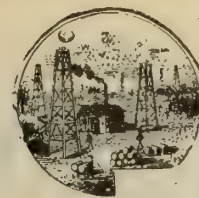
Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

ENCOURAGED TO TRADE WITH CANADA.

We are glad to learn from several sources that, though uncertainties on some points of interpretation have hindered the good influence of the new Canadian tariff upon British exports to the Dominion, a decided stimulus is being given to Anglo-Canadian trade by the recent reduction in duties. At least half a dozen English houses of high standing have sent representatives to Canada, with a view, should expectations be realized, of establishing branches there. Traders in certain lines who have hitherto found the old tariff and the want of a satisfactory insolvency law insuperable obstacles to the promotion of their business in Canada, have been encouraged by the lower duties to once more turn their attention to Canada, with every prospect of good results. Much, too, must result from the visit to Canada of the members of such bodies as the British Association and the British Medical Association. They have seen with their own eyes and heard for themselves of the commercial revival which reduced taxation, good crops, gold discoveries and general development are bringing to Canada, and they cannot have failed to note the strong desire of the Canadian Ministry and people to do all in their power to quicken the trade relations between the Dominion and the Mother Land. As one small indication of this we may mention that the visit of the British doctors to Canada is giving a decided stimulus to the British export trade in surgical instruments.—Canadian Gazette, London, Eng.

HOW A BUYER WAS IMPRESSED.

I was going along a street in Edinburgh, on the way out to Leith, and a window display caused me to linger. The shop was not a large one, but the trimmer understood his business, for the goods were arranged with an eye to effect, and the dress and other materials which would not interest a man were set off by the tasteful display of some small articles. Price-tickets everywhere. I wanted to buy a present and entered. At once the eye noticed that the shop was a small one not likely to attract a casual purchaser except for the excellent window display. The first thought was to go out and try some larger place. But being in, enquiry was made to examine one of the smaller articles shown in the window—a pair of glove stretchers. The salesman knew his business, and the article was purchased. Sizing up his customer for a stranger, he produced one or two other things. The end was a purchase amounting to five shillings instead of one shilling, as at first intended. Perhaps good salesmanship was a strong factor, but the window display started the thing.



VanTuyt & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL

TORONTO



Tandem Anti-Friction

--- Metal

LAMPLOUGH & McNAUGHTON

MONTREAL.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works

(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

MAKING SOIL PIPE JOINTS.

I HAVE noticed, writes "A Workman" in Metal Worker, that my employer takes more pleasure in showing to his customers as, they come to new buildings in which he is doing the work, his completed work than he does the roughing-in work, and yet those who are engaged in the plumbing business know thoroughly well that care in doing the roughing-in work is of more importance than the handsome finish in the bathroom of a luxurious mansion. To some it is a simple matter to make the joints in cast iron soil pipe. They think that it is only necessary to put in some oakum in order to prevent the molten lead from running down the pipe, and then, if the lead wells up slightly above the top of the hub and is flattened down, that all is done that is required.

In one case where I worked on a job of running the soil pipe in a building seven stories high there were several stacks of soil pipes. I ran two of the stacks, and the men who worked on several of the other stacks were from one and a half to two floors ahead of me with their work, which was noticed by my employer, who remonstrated with me for being so slow, saying that he paid me the same wages as he did the others and expected to get as much work done in a day for his money. I told him that if he kept a record of the time required in making the joints and repairing the leaks I thought he would make more money on me than he did on some of the others, and with this answer he seemed satisfied to wait for the final result. I had but one leak in my work, which was overcome by a little extra calking. There were several leaks in all the other stacks of soil pipe, and the result was that I was employed three days in repairing these defects. On this account I thought that some in the trade might be interested in my method of making a joint.

I am careful to pick over my oakum, and to have a good yarning tool. In putting in the oakum I am careful to have the spigot end of the pipe centrally located in the hub. I pour all of my joints, whether horizontal or upright, with a gasket, so that on removing the gasket the lead has an upward pitch from the hub to the pipe. After the lead is poured, I take a cold chisel and go all around the pipe, and drive the lead from

the pipe. Then with a tool that is wide enough so that it will not wedge down between the hub and the pipe so as to split it, I flatten all expanded lead.

A mechanic will readily see that by flattening the lead down it must be forced tightly against the pipe and against the inner side of the hub, making not only a tight joint against sewer gas and water, but also one that is less likely to be affected and destroyed by expansion and contraction than a joint that is made by a simple riveting process, as is the case when the lead is allowed to well up a trifle above the hub and then driven down into it without anything to induce a sidewise expansion.

BUSINESS PROSPECTS FOR PLUMBERS.

The general impression among the larger plumbing houses in Toronto is that Toronto is on the eve of a revival, probably a great revival, in the price of property and buildings. Householders generally are improving their property to an extent not equalled of late years.

Plumbers state that in their conversation with those who give them contracts for repairing, alterations, etc., they find that the renewed feeling of confidence has made it possible to improve their houses, as they have long desired to, but the dulness of trade, etc., made it impossible till this fall.

Landlords, also, see in the present circumstances the desirability of getting their houses into as attractive condition as possible, and orders for new baths, radiators, gas-fixtures, etc., have been, as a consequence, keeping the leading plumbers very busy.

PLUMBING CONTRACTS.

Guest & Co., Toronto, have contracts for gas-fitting in five residences in Little York.

Wm. Briggs, of Montreal, has secured the contract for the plumbing, heating and ventilating of a house for Mrs. E. A. MacKenzie.

E. C. Mount & Co., of Montreal, have the contract for the plumbing, heating and ventilating of two houses for A. Brown, Westmount.

Fiddes & Hogarth, Toronto, have contracts for new system of heating in a hotel on Yonge street, and for heating the office building of Wm. Harris & Co., Danforth avenue, Toronto.

The John Ritchie Plumbing and Heating Co., Limited, Toronto, have the contracts for making alteration in heating of Gladstone Hotel, Queen street, and for the plumbing in a residence on Carlton street, Toronto.

Purdy, Mansell & Mashinter, Toronto, have plumbing and steam heating contract for new warehouse on York street for S. F. McKinnon; for hot water heating of a residence for Jas. Snyder, Deer Park; also plumbing and heating contracts for Loretto Abbey, Toronto.

REMOVING DEPOSITS IN PIPES.

Waste water running into drains and sewers is of very little account in removing deposits of solid matter which accumulate in them. This is proved by the fact that in many large cities where the consumption is greatest it is necessary at frequent intervals during the year to flush the sewers for the purpose of removing the deposits which gather there. It is weight and volume of water that is required, and the same rule

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power.)

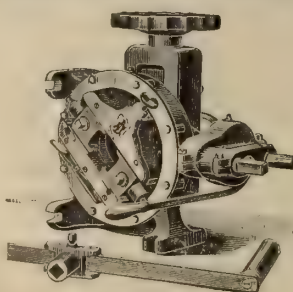
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

CURTIS & CURTIS

No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

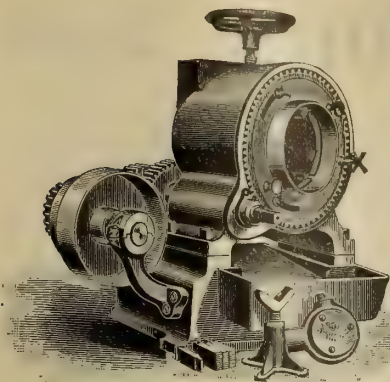
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

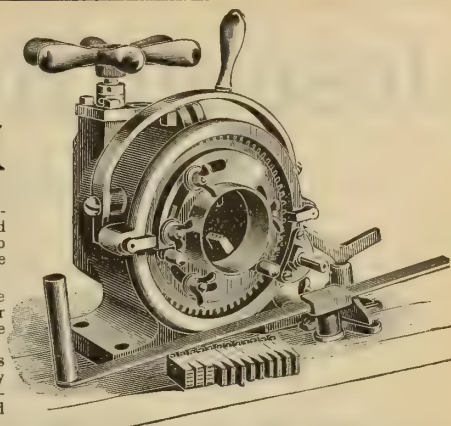
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

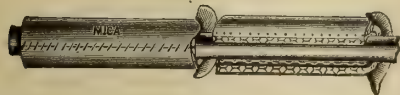
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by The Mica Boiler Covering Co., Ltd., also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS



RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS



RUBBER
GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

MOULDED
RUBBER
GOODS

Hardware, Plumbers' and Bicycle Specialties.

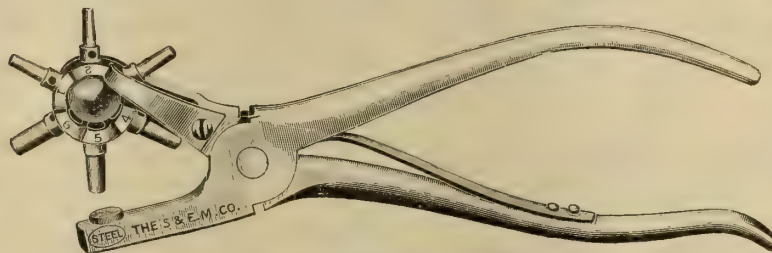
OUR GOODS ARE WELL KNOWN IN CANADA.

NO 3

1897

CATALOGUE

Send for it.



NEW REVOLVING PUNCH.

Mention this paper,
Canadian HARDWARE
AND METAL.

THE SMITH & EGGE MFG. Co., Bridgeport, Conn., U. S. A.

will apply in the cleaning out of a drain or waste pipe. In the ordinary closet a stream of water pours through the valve into the arm of the bowl, then encircles the bowl, feebly drops into the trunk of the closet then into the trap and down the soil pipe. The internal circumference of the soil pipe is a little over twelve inches. The stream of water flattened out will not exceed four inches. Consequently but one-third the inside circumference of the soil pipe is ever washed by the water. A pail of water thrown into the bowl of a water closet, an operation taking only a few seconds of time and a few gallons of water, will have a flushing effect more complete than if the closet valve were kept open for a whole day.

PLUMBERS AND JOBBERS AGREE.

For some time there have been certain matters under dispute between the wholesale plumbers' supply dealers of Montreal and St. John, N.B., and the National Association of Master Plumbers. Mr. Joseph Wright, of Toronto, president of the National Association of Plumbers, and Mr. J. H. Doody, of St. John, N.B., visited Montreal last week to confer with the jobbers, and Mr. Wright reports that the difficulties have all been settled satisfactorily.

PLUMBING NOTES.

The Grey and Bruce Loan Co. are about to erect a fine office block in Owen Sound,

Ont. The Times, of that town, prophesies that many residents paying rent there will be erecting houses for themselves next summer.

The Toronto Radiator Co. will underpin their factory at the Queen street subway at a cost of \$1,000.

The St. Thomas City Council is talking of rebuilding two of its schools, each to contain about twelve rooms.

Messrs. Curry & Baker have taken out a permit for the erection of a dwelling, to cost \$8,000, at 49 St. George street, Toronto.

The merchant who is respectful towards his customers earns business as well as respect for himself.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL

CURRENT MARKET QUOTATIONS

TORONTO, Oct. 15, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 16½
Straits	0 16	0 16½

Tin Plates.

Charcoal Plates—Bright.		
.L.S., equal to Bradley.	Per box.	\$5 00
I.C., usual sizes		6 25
I.X., "		7 50
J. R. & Co.—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Famous—		
I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	
Raven & P. D. Grades—		
I.C., usual sizes	3 50	
I.X.	4 25	
I.X.X.	5 00	
I.X.X.X.	5 75	
D.C., 12½x17	3 00	
D.X.	3 75	
D.X.X.	5 75	
NOTE.—Other brands might be shaded by 25c per box.		

Coke Plates—Bright.

Cessemmer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base.	3 15	
20x28.	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	7 50	
I.X., Orion	7 50	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs	0 05¼	0 06
" 14x60, "		
" 14x65, "		

Tinned Sheets.

.72x30 up to 24 gauge	0 06	0 06
" 26	0 06½	
" 28	0 07¼	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 55	
Refined	1 80	
Horse Shoe	1 80	
Band	1 75	
Hoop	2 00	
Swedish	4 00	4 25
Sleigh Shoe Steel	2 50	
Tire Steel	2 50	
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 14
Russian Sheet, per lb	0 10½	0 11
Tank Plates, 1-5 and thicker.	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½-inch	0 06½	
" 2	0 07¼	
" 2½	0 09¼	
" 3	0 11	

Steel Boiler Plate.

inch	2 45	
"	2 35	

¾ inch and thicker..... 2 25

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24	2 25	2 35
26	2 25	2 45
28	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 25	
Half polished	2 30	
All bright	2 90	

Iron Pipe.

Wrought, ¼ to ¾ inch, 17g; ½ inch, 2¼c; ¾ inch, 2 75c; 1 inch, 3¼c; 1¼ inch, 5c; 1½ inch, 6 45c; 2 inch, 8¼c.		
Galvanized, 60 per cent.		
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.		

Galvanized Iron.

Queen's Head or equal grades in case lots:		
Per lb.		
16 gauge	0 03¾	
18 to 24 gauge	0 03¾	
26	0 04½	
28	0 04¾	

Chain.

Proof Coil, 3-16 in., per 100 lbs	5 50	6 00
" ¼ "		4 75
" 5-16 "		4 00
" ¾ "		3 75
" 7-16 "		3 35
" 1 "		2 95
" 9-16 "		2 85
" 5/8 "		2 75
" 3/4 "		2 75
Trace, per doz. pairs.	3 60	5 90
German coil, per 100 ft.	1 65	2 70
Jack chain, iron, single, per doz. yards.	0 13	0 50
Jack chain, double, per doz. yards.	0 15	
Jack chain, brass, single, per doz. yards.	0 20	10

Copper.

Ingot.		
English B. S., ton lots	0 11¼	12
Lake Superior		
Bolt or Bar.		
Cut lengths, round, ½ to ¾ in.	0 20	0 22
" round and square		
1 to 2 inches	0 18	0 19
NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.		

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes	0 15	0 16½
NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.		
Planished and tinned, 14x48 and 14x60	0 25	0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb.	0 17	0 19
" 35 to 45	0 15½	0 16½
" 50 lb. and above,	0 15	0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb	0 21	
Spun, per lb.	0 25	

Wire.

Pure, in coils—		
From 1 to 20 gauge, 12½ p.c. off list.		
From 20 gauge up, 12½ p.c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c. off list.		
casts, hard-rolled, 2x4 ft.	0 20	

Foreign, per lb	0 04¾	0 05
Domestic "	0 03¾	0 04

Zinc Spelter.

5 cwt. casks	0 05¼	
Part casks	0 05½	

Zinc Sheet.

Imported Pig, per lb	0 04	
Domestic, per lb	0 03½	
Bar, 1 lb.	0 04½	
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04¾
Sheets, 3 to 6 lbs., per sq. ft., by roll.	0 04	0 04¼

NOTE.—Cut sheets ½ cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 27½ per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half	0 11	0 11½
Standard	0 10¾	0 11
Wire	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb.	0 08	0 08½

Anti-Friction Metal.

"Beaver" brand	\$0 20	
"Tandem" A	0 19	
B	0 16	
C	0 10½	

White Lead.

Pure, Assoc. guarantee, ground in oil,		
25 lb. irons	5 50	
No. 1 do	5 22½	
No. 2 do	4 75	
No. 3 do	4 37	
No. 4 do	4 03	
Brandram's B. B. Genuine	7 50	
" No. 1	6 75	
f.o.b. Halifax, St. John, Montreal, Toronto	6 70	
James' genuine	6 70	
" No. 1	6 20	

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	0 90
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 07	
Chrome Yellow	0 11	
Golden Ochre	0 06	
French	0 05	
Marine Black	0 09	
" Green	0 09	
Chrome	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe	1 35	1 40
cwt		
Yellow Ochre (J.F.L.S.), bbls.		
per cwt	2 75	
Yellow Ochre (Royal), per		
cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt.	1 75	1 80
Burnt Sienna, pure, per lb.	0 10	0 10
" Umber, "	0 10	0 10
do. aw	0 09	0 09
Drop Black, pure	0 09	
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03¾	



Ultra marine Blue in 28-lb. boxes, per lb.	0 08	
Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	
Pure Indian Red, No. 45, lb.	0 08	
Whiting, per 100 lb.	0 50	

Paris Green.

Casks		
50-100 lb. kegs		
25-lb. Irons		
-lb. Boxes		

Sulphate of Copper.

Casks, for spraying, per lb.	0 04¾	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls.	1 75	
Bulk	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

(In bbls.)		per gal.
Carriage, No. 1	1 50	
Extra do.	2 50	
Body Varnish	4 50	
Furniture Varnish	0 65	
Extra do.	0 90	
Demar Varnish	1 60	
Hard Oil Finish	1 40	
Orange Shellac Varnish	2 00	
White Shellac	2 20	
Rubbing Varnish	2 50	
Polishing Varnish	2 50	

Linseed Oil.

Raw, per gal. net	0 42	0 43
Boiled, per gal. net	0 45	0 46
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net.	0 50	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 10	
Small lot	0 11	

Cod Oil, Etc

Cod Oil, per gal.	0 50	0 55
Pure Olive		1 20
" Neatsfoot		90

Glue.

(In bbls.)		
Common	0 07¼	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatin	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear		0 09
Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.		

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dist. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent. Amer.		
Central Fire Cartridges, pistol sizes, Dom.		
30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.		
Shot.		
Canadian, common, 12½ per cent.		
Brass Shot Shells, 55 and 10 per cent.		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		Blind Rollers.		Cradles, Grain.		HAMMERS.	
Best thick white felt wadding, in ½-lb bags.....		Annex, per doz.....		Canadian dis. 25 per cent.		Nail	
1 00		1 25 1 75				Maydole's, dis. 5 to 10 per cent. Can., dis 25 to 27½ per cent.	
Best thick brown or grey felt wads, in ½ lb. bags.....		Mascott, ".....				Tack.	
0 70		1 35 1 85				Magnetic, per doz.....	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....		Erminie, ".....				1 10 1 20	
0 99		1 12 1 20				Sledge.	
Best thick white card wads, in boxes of 500 each, 10 gauge.....		Blind and Bed Staples.		Dies.		Canadian, per lb.....	
0 35		sizes, per lb.....		Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		0 07½ 0 08½	
Best thick white card wads, in boxes of 500 each, 8 gauge.....		0 7½ 0 12		Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		Ball Pean.	
0 55		Bolts.				English and Can., per lb.....	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....		Carriage, dis., 70 p. c. off new list		Door Springs.		0 22 0 25	
0 20		Tire, dis., 70 and 5 per cent.		Torrey's Rod, per doz..... (15 p.c.)		2 00	
Thin card wads, in boxes of 1,000 each, 10 gauge.....		Stove dis., 70 per cent.		Coil, per doz.....		0 88 1 60	
0 25		Elevator, dis., 35 to 40 per cent		English per doz.....		2 00 4 00	
Thin card wads, in boxes of 1,000 each 8 gauge.....		Machine, dis., 70 p.c.					
Chemically prepared black edge grey cloth wads, in boxes of 250 each—		Coach Screws, dis. 80 p.c.		Boring Machines.		Draw Knives.	
Pe M		Complete, with augers, each..		5 00 7 50		American, dis. 70 and 10 per cent.	
11 and smaller gauge.....		Braces.		American, dis. 25, 50 and 10 per cent.		Axe, per doz., net,.....	
0 60		Barber's.....				50 2 00	
9 and 10 gauges.....		6 00 7 75				Store door, per doz.....	
0 70		Barber's Ratchet.....				1 00 1	
7 and 8 gauges.....		10 00 11 00				Chest, per doz. pairs.....	
0 90		Farmers.....				0 40 2 50	
5 and 6 gauges.....		2 00 2 75				Chisel.	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		15 50 29 00				Firmer, per gross.....	
11 and smaller gauge.....		Brackets.				3 00 4 50	
1 15		Shelf.				Socket Firmer, per gross.....	
9 and 10 gauges.....		Japaned Canadian, per doz.				3 25 8 00	
1 40		pairs.....				Socket Framing, per gross.....	
7 and 8 gauges.....		0 50 3 40				3 75 5 00	
1 65		Berlin Bronze Canadian.....				Fork.	
5 and 6 gauges.....		0 85 3 20				C. & B., dis. 45 per cent. rev. list.	
Anvils.		Broilers.				C. & B., dis. 45 per cent. rev. list.	
Per lb.....		Light, dis.. 65 to 67½ per cent.				Saw.	
0 10 0 12½		Reversible, dis., 65 to 67½ per cent.				American, per doz.....	
Anvil and Vice combined, each.....		Vegetable, per doz., dis. 37½ per cent.				1 00 1 25	
4 50		Hemis, No. 8, ".....				Plane.	
0 09 0 09½		6 00				American, per gross.....	
Wilkinson & Co.'s Anvils, lb.....		Hemis, No. 9, ".....				3 15 3 75	
0 09½ 0 10		7 00				Hammer and Hatchet.	
Wilkinson & Co.'s Vices, lb.....		Queen City.....				Canadian, 45 per cent.	
0 09½ 0 10		7 50 10 00				Cross-Cut Saw.	
Augers.		Butchers' Cleavers.				Canadian, per pair.....	
Gilmour's, discount 65 p.c. off revised list.		From 8 to ch, per doz....				0 15 0 0	
Hollow Stearn's, per dozen.....		4 23				HANGERS.	
13 00 20 00		Butts.				Door, 4 and 5 inch, per pair.....	
Adjustable Stearn's, each.....		Brass.				Lanes, 50 to 50 and 5 per cent.	
5 50 6 50		Wrought Brass, dis., 17½ p.c. revised list.				HATCHETS.	
Post-hole, Vaughan's, each.....		Cast Iron.				Canadian, dis. 40 to 42½ per cent	
1 35 1 60		Loose Pin, dis. 70 per cent.				HINGES.	
Excelsior, Jennings', discount 50 per cent.		Wrought Steel.				Blind, Parker's, dis. 60 and 10 to 65 per cent'	
		Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.				" Shepard's Noiseless, dis. 60 per cent.	
		Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.				" Buffalo, dis. 60 to 70 p. c.	
		Berlin Bronzed, dis. 70, 70 and 5 per cent.				Light T and strap, 70 and 10 p.c.	
		Gen. Bronzed, per pair.....				Heavy, per lb.....	
		0 40 0 65				0 03¾ 0 04¾	
		Can Openers.				Screw hook and hinge—	
		Acme, per gross.....				6 to 12 in., per 100 lbs.....	
		9 00 10 00				..... 3 15	
		Sardine Scissors, per doz.....				14 in. up, per 100 lbs.....	
		3 75 4 50				Per doz. set..... 2 35	
		Card.				Screw Eureka.....	
		Horse, per do.....				1 13 1 80	
		0 60 1 00				1 50 2 20	
		Carpet Stretchers.				" Shepard's, dis. 50 to 60 per cent.	
		American, per doz.....				Per doz. pai	
		1 00 50				1 00 3 50	
		Bullards, per doz.....				" Shepard's Samson.....	
		6 50				1 20	
		Carpet Sweepers.				HOES.	
		Bissell, per doz.....				Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list	
		22 50				Planter, per doz.....	
		World, ".....				4 00 4 50	
		21 75				HOOKS.	
		Daisy, ".....				Cast Iron.	
		24 00				Bird Cage, per doz.....	
		Star.....				0 50 1 10	
		Crown Jewel, per doz.....				Clothes Line, per doz.....	
		29 00				0 27 0 63	
		Grand Rapids, ".....				Harness, per doz.....	
		24 00 33 00				0 72 0 8	
		Cartridges.				Hat and Coat, per gross.....	
		(See Ammunition.)				1 00 3 00	
		Castors.				Chandelier, per doz.....	
		Bed new list, dis. 55 to 57½ per cent.				0 50 1 00	
		Plate, dis. 52½ to 57½ per cent.				Wrought Iron.	
		Cattle Leaders.				Wrought Hooks and Staples, Can., dis. 47½ per cent.	
		Nos. 31 and 32, per gross.....				Wire.	
		8 50 9 50				Hat and coat, dis. 60 to 60 and 10 p.c.	
		Cement.				Belt, per 1,000.....	
		Canadian, Portland.....				0 60 2 70	
		2 50				crew, bright, Eng., dis. 60 per cent.	
		English.....				HORSE NAILS.	
		2 50				Canadian, dis. 50 p.c.	
		Belgium.....				Canada Horse Nail Co.'s "C"	
		2 35				brand F. o. b. Montreal, 50 p.c.	
		Canadian hydraulic.....				HORSE SHOES.	
		1 10				F. o. b. Toronto and Hamilton 3 35	
		Figures are for barrel lots.				Steel, ".....	
		Chalk.				4 85 5	
		Carpenters' Colored, per gross.....				F. o. b. Montreal 10c. less, and London more than above.	
		0 45 0 75				ICE PICKS.	
		White lump, per cwt.....				Star per doz.....	
		0 60 0 65				3 00 3 25	
		Red.....				KETTLES.	
		0 05 0 06				Brass spun, 7½ p.c. dis. off new list.	
		Crayon, per gross.....				Copper, per lb.....	
		0 14 0 18				0 30 35	
		Chisels.				American, 60 and 10 to 65 and 5 p.c.	
		Socket, Framing and Firmer.				KEYS.	
		American, dis. 75 to 77½ per cent.				Lock, Can., dis. 50 p.c.	
		Canadian, dis. 50 and 10 per cent.				Cabinet, trunk, and padlock,	
		Tanged firmer, per doz.....				Am. per gross.....	
		0 85 4 00				1 60	
		Churns.				KNOBS.	
		Daisy or Leader, dis. from stock or factory, 60, 10 and 10 per cent.				Door, japaned and N.P., pe	
		Steel, net.....				doz.....	
		3 00				0 85 3 00	
		Clamps.				Bronze, Berlin, per doz.....	
		Judds', dis. 20 per cent.				2 75 3 25	
		stearn's, per doz.....				Bronze Gem, ".....	
		3 00 10 00				6 00 9 00	
		Clips.				Sava, ".....	
		Axle dis. 65 per cent.				8 75 10 00	
		Coffee Mills.				Shutter, porcelain, F. & L.	
		Box.....				screw, per gross.....	
		3 60 13 00				1 30 4 00	
		Side.....				GLUE POTS.	
		3 60 4 00				Tinned, each.....	
		Enterprise, No. 0.....				0 30	
		1 35				Enamelled each.....	
		No. 2.....				0 55	
		70				GRINDSTONE FIXTURES	
		Compasses, Dividers, Etc.				P. S. & W., per doz.....	
		American, dis. 62½ to 65 per cent				3 60 4 00	

KNIVES.

Clauses, bread, cake, and paring knives, \$7.00 doz. sets net, to 10 per cent.	
Christie, \$7.00 net.	
Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.	
Lightning, per doz.	6 50 8 40
Heath's, 52½ p.c.	

LADLES.

Melting, per doz.	1 70 4 50
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LEMON SQUEEZERS.

Porcelain lined, per doz.	2 20 5 60
Galvanized, " "	1 87 3 85
King, wood, " "	2 75 2 90
" glass, " "	4 00 4 50
A glass, " "	1 20 1 30

LINES.

Fish, per gross.	1 05 2 50
Chalk, " "	1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.	
Russell & Erwin, per doz.	1 75 7 50

Cabinet.

Eagle, dis. 30 p.c.	
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Padlock.

English and Am., per doz.	0 50 6 00
Scandinavian, " "	1 00 2 40

Eagle, dis. 15 to 17½ p.c.	
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MACHINE SCREWS.

Iron and Brass.	
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Flat head, discount 25 p.c.	
Round Head, discount 20 p.c.	

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb.	25
No Name Metal, " "	18
Mystic Metal, " "	08

F. O. B. New York or Chicago.	
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MALETS.

Tinsmiths', per doz.	1 25 1 50
Carpenters', hickory, per doz.	1 25 3 75
Lignum Vitae, per doz.	3 85 5 00
Caulking, each	1 60 2 00

MATTOCKS.

Canadian, per doz.	8 50 10 00
American, 60 and 10 p.c. off list.	

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.	
German, 15 per cent.	

MINCING KNIVES.

American, per doz.	0 42 2 35
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MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent	
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NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.	
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Cut Nails (Steel). Add 10c. to the prices in list for iron nails.	
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Wire Nails, basis, \$1.85 for carload lots and \$1.95 for less quantities; Toronto. Terms, 4 months or 3 off and 30 days.	
---	--

Brads and finishing nails, special sizes, 80 p.c. from new list.	
--	--

NAIL PULLERS.

German and American.	1 85 5 60
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NAIL SETS.

Square, round, and octagon, per gross	3 38 4 00
Diamond	12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.	
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OIL.

Canada refined oil (Toronto).	0 16 0 16½
Carbon safety " "	0 18 0 00
Canada w. w. " "	0 18 0 00
American w. w. " "	0 00 0 21
Pratt's Astial.	0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz.	0 00 19 50
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Zinc and tin, dis. 50, 50 and 10.	
Copper, per doz.	1 25 3 50
Brass, " "	1 50 3 50
Malleable, dis. 25 per cent.	

PAIIS.

Galvanized, per doz.	2 25 3 30
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PENCILS.

Dixon's, per gross.	1 00 4 25
Carpenter.	2 25 3 60

PICKS.

Per doz	6 00 9 00
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PICTURE NAILS.

Porcelain head, per gross.	1 40 3 00
Brass head, " "	0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis Mfrs., Bridgeport, Conn.	
--	--

No. 30 Hand Machine, range ¼ to 2 in. R. & L.	\$ 50 00
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No. 38 Hand Machine, range 1½ to 4.	100 00
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No. 56 Hand Machine, range 2½ to 6.	175 00
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PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.	
Wood, fancy Canadian or American, 37½ to 40 per cent.	

Bailey's (Stan. R. & L. Co.), 50 per cent.
Miscellaneous, dis. 25 to 37½ per cent.
Bailey's Victor, 25 per cent.

PLANE IRONS.

English, per doz.	2 00 5
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PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.	
Button's Imitation, per doz.	5 00 9 00
German, per doz.	0 60 2 60

PLUMBS AND LEVELS.

S.R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.	
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POPPERS.

Corn, square, per doz.	1 35 2 00
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PRUNING SHEARS.

Per doz	4 00 5 50
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PULLEYS.

Hothouse, per doz.	0 55 1 00
Axle, " "	0 22 0 33
Screw, " "	0 27 0 33
Awning, " "	0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.	
Pitcher spout, 70 to 70 and 5 p.c.	
Canadian cistern, 60 p.c.	
Canadian pitcher spout, \$1.25 to \$3.	

PUNCHES.

Saddlers', per doz.	1 00 1 85
Conductors, " "	9 00 15 00
Tinners' solid, per set.	0 00 0 72
" hollow, per inch.	0 00 1 00

PUTTY.

Bladder, per lb.	1 75 0 1½
Tins, lbs.	2 50 2 75

RAIL.

Barn door, per foot.	0 02½ 0 02½
Sliding door, " "	0 03½ 0 03½
Lanes, " "	0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.	
Wood, 25 per cent.	

RAZORS.

Geo. Butler & Co.'s, per doz.	8 00 18 00
Boker's, " "	7 50 11 00
Wade & Butcher's, " "	3 60 10 00
Arbenz's, " "	9 00 18 00
Theile & Quack's, " "	7 00 12 00

RAZOR STROPS.

Currier's, per doz.	1 25 3 60
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RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days	
Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.	
Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.	
Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.	
Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.	
Black M. Rivets (Norway Iron) 60 p.c.	
Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. cartoons, 1c. per lb. extra, net.	
Burrs, iron or steel, 55 and 5 per cent.	
Terms, 4 mos. or 3 per cent. cash 30 days.	

RIVET SETS.

Canadian dis. 35 to 37½ per cent.	
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ROPE.

7-16 in. and larger, per lb.	6½ 00 7½
¾ in. and 5-16 in.	6½ 00 7½
Cotton	15 17 8½
Russia Deep Sea	00 13
Jute	6¾ 7½

RULES.

Boxwood, dis. 80 and 10 p.c.	
Ivory, dis. 37½ to 40 p.c.	

SAD IRONS.

Mrs. Potts, per set.	0 62½ 1 00
" N.P., per set.	90

SAD HEATERS.

Dome, Shepard's, per doz.	4 75 5 00
---------------------------	-----------

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.	
B. & A. sand, 40 and 2½ per cent.	
Emery, per quire.	0 60 0 90

SASH CORD.

Per lb.	0 22 50
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SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.	
Kempshell's, dis. 40, 62½ per cent.	
Canadian, dis. 45, 50 per cent.	

SASH WEIGHTS.

Sectional, per 100 lbs.	1 40 1 50
Solid, " "	1 10

SAWS.

Crosscut, McMillan & Haynes, per dozen	0 40 0 70
"Empire," McMillan & Haynes, per ft.	0 00 0 70
Hand, Diston's, dis. 12½ to 15 p.c.	
S. & D., 40 to 40 and 10 per cent.	
Crosscut, Diston's, per ft.	0 35 0 55
S. & D., dis. 35 p.c. on Nos. 2 and 3.	
Hack, complete, each.	0 75 2 75
frame only.	0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz.	0 70 7 50
Whiting.	6 87 7 00

SCALES.

Gurney Scales, 50 p.c.	
B. S. & M. Scales, 50 p.c.	
Champion 60 per cent	

SCRAPERS.

Box, per doz.	2 10 4 50
Boot, " "	0 40 3

SCREENS.

Window, patent, per doz.	2 20 4 50
Door, per doz.	7 10

SCREW DRIVERS.

Sargent's per doz.	0 65 4 00
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SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.	
Wood, B. H., " dis. 80 and 10 p.c.	
" F. H., brass, dis. 82½ and 10 p.c.	
" R. H., " dis. 75 and 10 p.c.	
Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.	
Bench, wood, per doz.	3 25 4 00
" iron, " "	4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.	
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SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.	
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SHEARS.

B. & W., jappanned, dis. 75 p.c.	
B. & W., N.P., dis. 65 p.c.	
Seymour's, dis. 60 p.c.	
Etna, dis. 75 to 75 and 10 p.c.	
Heinisch, dis. 60 p.c.	
Bristol, jappanned, 80 p.c.	
N.P., dis. 70 p.c.	
Clausa, full nickel, 60 p.c.	
jappanned handles, 67½ p.c. off.	
Seymour or Heinisch tailor shears, 15 p.c.	

SHEAVES.

Sliding door, per set.	0 77 1 40
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SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.	
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SIEVES.

Wood rim, black, per doz.	1 05 1 10
" tinned, " "	1 25 1 35
Tin rim, per doz.	2 30 2 45
" black, " "	1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.	
Acme	3 00 5 00
Lock, Andrews', dis.	4 50 11 50

SOLDERING IRONS.

Per lb.	0 23 0 25
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WROUGHT SPIKES.

Discount, 30 to 35 per cent.	
------------------------------	--

SPOKE SHAVES.

Wood, English	1 8 5 00
ron, American.	1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross	7 50 12 00
Dessert, " "	21 00 00 00
Table, " "	30 00 30 00
Dessert Forks, " "	24 00 00 00
Medium " "	27 00 00 00
Table " "	36 00 00 00

SQUARES.

Iron, per doz.	1 65 2 90
Steel, dis. 70 per cent., revised list.	
Try and bevel, dis. 50 to 52½ p.c.	

STAPLES.

Fence, galvanized	2½ 2½
Wrought iron, dis. 80 to 82½ p.c.	

STOCKS AND DIES.

American, dis. 25 p.c.	
------------------------	--

STONE.

Washita, per lb.	0 28 0 60
Hindustan, " "	0 06 0 07
" slips, per lb.	0 09 0 09
Labrador, " "	0 00 0 13
" Axe, " "	0 00 0 15
Turkey " "	0 00 0 50
Arkansas " "	0 00 1 50
Water-of-Ayr " "	0 00 0 10
Scythe, per gross.	3 50 5 00
Grind. per ton.	15 00 18 00

TACKS, BRADS, ETC.

Cheese-box tacks, blue, 80 p.c.	
Trunk tacks, black, 80 p.c.	
" tinned, 80 p.c.	
B.B.B. iron carpet, blued	80
" tinned	80
B.B.B. iron carpet, bright or blued (in kegs)	40
B.B.B. iron carpet, tinned (in kegs)	45
B.B.B. cut tacks (in bulk), 75 and 10 ¼ weights	40
Swedes, cut tacks, genuine, blued and tinned, 75 and 10	80
Swedes, upholsterers	80
Swedes, carpet, blued and tinned	70
" lace	75
" brush	50
" gimps, blued, tinned & japan'd	70
Zinc tacks	¾
Copper tacks	¾

Leather carpet tacks	65
Trunk nails, black and tinned	70
Clout nails	66½
Cigar box nails	45
Lining nails in papers	10
" in bulk	15
" solid heads, in bulk	66
Saddle nails in papers	15
" in bulk	15
Tinned capped trunk nails	15
Double pointed tacks, discount 90 and 25 p.c.	

PEARSON'S PATENT Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2 1/2 to 48 inches.

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Manufacturers of

CHARCOAL PIG IRON

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BRAND "C.I.F." THREE RIVERS

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Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

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of .

Tubular and
Cold Blast
Lanterns

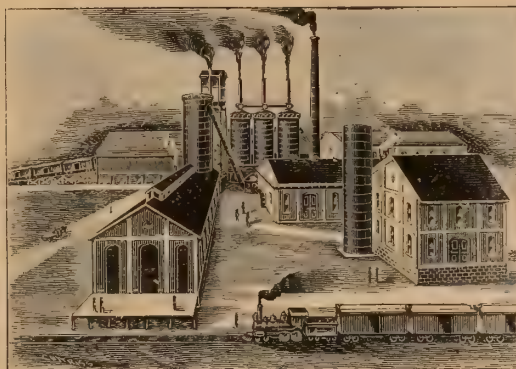
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and Japanned

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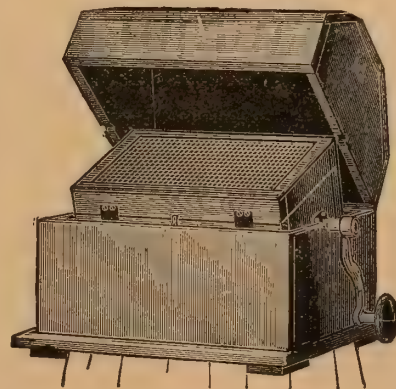


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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, OCTOBER 23, 1897

No. 43



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TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

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IT'S WORKABLE...

Will stand double seaming, or any other test to which Iron can reasonably be put, every time.

IT'S FLAT...

You don't say "flat as a pancake" now, but "flat as 'QUEEN'S HEAD' Iron."

IT'S BRIGHT...

No second-class Galvanizing—you know it at once by its beautiful appearance, and it WEARS.

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More sheets to the ton than any competing brand. It is cheaper by the sheet than any other good make.

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Canada's Largest Radiator Manufacturers.

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"Safford"

ARE THE ONLY PERFECT

Radiators

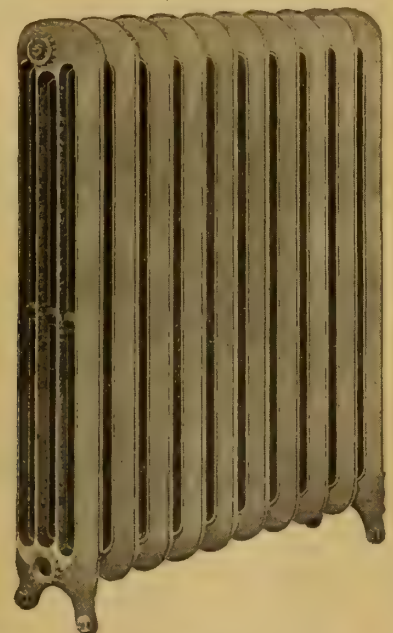
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TORONTO

A Complete Lavatory

The cut shown illustrates our **Patent**

COMBINED BATH AND WASH BASIN



Hot and Cold Water Supplied to Bath and Basin.
Waste from Basin DOES NOT Discharge into Bath.

SEND FOR PRICES

The Toronto Steel-Clad Bath
and Metal Co. Limited.

125 and 127 Queen St. East, TORONTO

Keep a Little Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price.

NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP

Are you ready for the Fall
Trade in this line ?

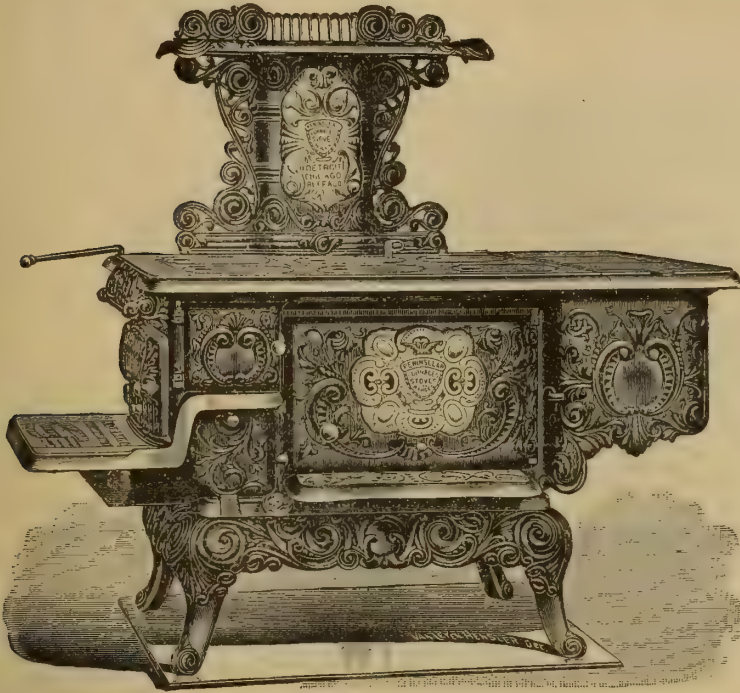


Patented 1896

KEMP MANUFACTURING CO.

Toronto

NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new goods with same dress as the Granite Range, which is acknowledged to be the prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO. - - PRESTON, ONT.

Clearing Sale . .

♦♦♦
**IMPORTANT
 ANNOUNCEMENT
 TO THE
 HARDWARE
 TRADE**
 ♦♦♦

Owing to a change of business there will be a **Great Clearing Sale of the Bowman, Kennedy & Co., Hardware Stock**, amounting to seventy thousand dollars.

From Monday the 11th to the 30th of October this stock will be offered without reserve.

This will be a great opportunity to purchase your fall stock of hardware. The above stock has been **bought for cash when values were the lowest**, and as goods are now advancing there could not be a better time for buying.

A visit to the warehouse will be to the buyer's interest. The stock consists of **General Hardware, Sporting Goods, Glass, Paints, Oils, Varnishes, Silverware, etc.**, all of which will be cleared out. **This will be the most important clearing sale ever held in the Province**, as the stock is new and well assorted. Orders filled as received and accepted subject to stock not being sold. Yours truly,

Bowman, Kennedy & Co., London, Ont.

ALWAYS COLD.

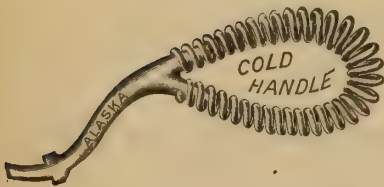
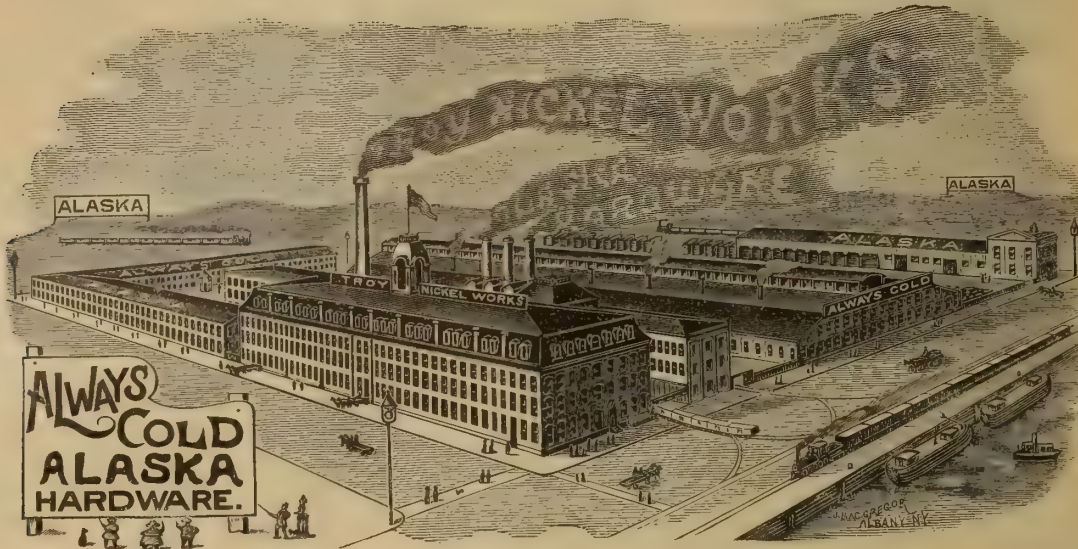
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc., Etc.



To Canadian Trade

If your Jobbers don't carry this line send to us for prices. We will land the goods at your door. WRITE US ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

Think of the capacity,
up to 30,000 cubic feet !

OUR . . .

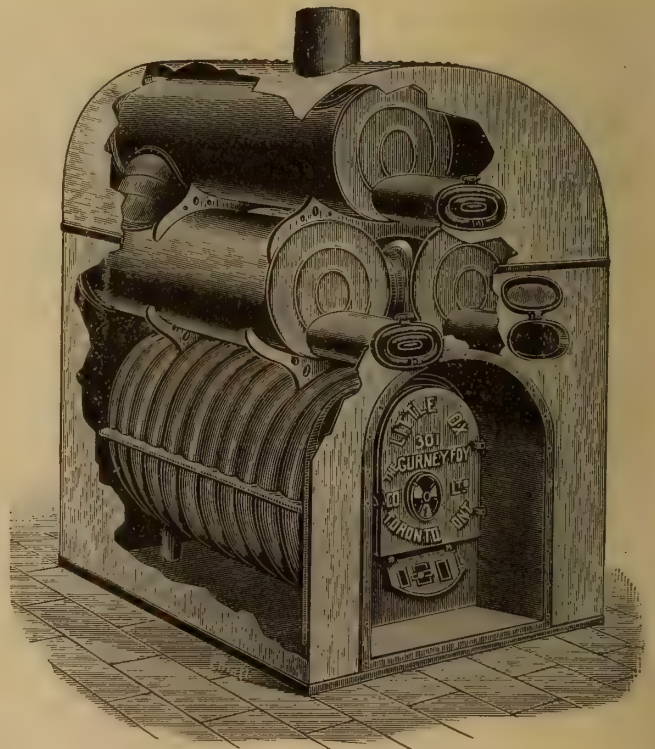
LITTLE OX

Wood
Furnace

Is the most powerful furnace
of its class in the market.

They are portable or stationary for brick setting, and have either Double or Triple Return Flue Radiators, giving them an immense fire travel.

They are smoke and dust-proof, take 3-ft. rough wood, are very easy to manage—in fact have more talking points than any other furnace you can find. Satisfaction is certain. Write us for catalogue and prices.



Portable—with Triple Return Flue Radiator.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



J. BAYNE MacLEAN, President. HUGH C. MacLEAN, Sec.-Treas.

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CANADA AND HER PROSPECTS.

CANADA'S greatest need is population. We are blessed with a wealth of forest, of fisheries, and of field. Our mining possibilities are enormous, while with a system of inland navigation we have been richly endowed. But population has to be brought in.

At present the area of Canada is 3,456,383 square miles, the largest of all the British colonies, but the head of population to each of these square miles is only 1.4, or about the smallest of any British colony. The last official estimate of the population of the Dominion places it at 5,083,424.

Before a man can be induced to emigrate from his native land he must be assured that there is some tangible reason for his so doing: He must be assured it will pay him; and not only that it will pay him, but that the general conditions of the country are inviting.

There are two chief causes why Canada in the past has not received as large a proportion of the immigrants which have left the Motherland and other European countries. The first is misconceptions regarding the climate of the Dominion and the second is

due to the want of proper methods in presenting Canada to the world.

Canada has been looked upon by a great many people in Europe as a section of the North Pole, encircled with icebergs and covered with snow. A greater mistake was never made. Canada experiences some cold weather during the winter, but it is rarely cold enough to be unpleasant to a healthy man or woman.

If there was no other evidence of the favorable climatic conditions of Canada the variety and quality of the fruit the country produces is ample proof on that point.

But the outside world is gradually being seized of the facts concerning Canada, and as they get the knowledge we shall get the population.

The year 1897 has been to Canada probably the most auspicious since Confederation. Never before was she advertised as much, and never before were her resources as much revealed.

Knowledge of her cereal and fruit producing capabilities, and evidences of the enormous richness and vastness of her mineral resources has been disseminated all over the civilized globe. Then the prominence Canada assumed during the Jubilee celebration caused her nationality to blaze forth with such brightness that it was seen not only throughout the Empire, but foreign nations caught well-defined glimpses of it. And within the last few days its financial condition has been brought into strong and favorable relief (1) by the report of the Grand Trunk Railway, and (2) by the suc-

cess with which the Canadian loan was floated in London.

With Canada's reputation high abroad, and good times upon us at home, the outlook is most encouraging. Canada has turned a lane in her history.

When a man boasts of the superior brand of his honesty see to it that your pockets are buttoned up.

OUR LUMBER TRADE WITH GERMANY.

A CABLE under date of Berlin, October 20th, states that the Kolnische Zeitung is urging the German Government to open negotiations between the Canadian railways and canals and the German Chambers of Commerce and the timber firms with a view of importing lumber from Canada instead of from the United States. It furthermore suggests that German capital might be introduced into the Canadian timber trade and the foundation laid that would lead up to an actual treaty.

Canada will of course hail with pleasure any movement having for its object the extension of her lumber trade with Germany or any other country.

We already do a little business with Germany in lumber, but it does not amount to a great deal. Last year our total exports of products of the forest to that country were only valued at \$24,648 out of a total of \$27,175,686 worth to all other countries, or less than one per cent. of the whole.

As far as German capital is concerned we are not at all averse to its coming into Canada, nor are we averse to any foundations being laid with a view to an enlarged general trade with the German Empire.

NEWFOUNDLAND IRON ORE.

A British contemporary notes the arrival at Workington of a cargo of hematite ore from Newfoundland. It is an experimental shipment.

The iron ore deposits of Newfoundland have been attracting a good deal of attention during the last couple of years.

For years iron has been known to exist in the island, but up to within two years ago it was all of the magnetic variety, and contained too much titanitic acid to allow it to be profitably worked. About two years ago, however, an enormous deposit of brown hematite ore was discovered on Belle Isle, an islet in Conception Bay.

The deposit is estimated to contain about 40,000,000 tons of ore, and assays have demonstrated that it contains from 48 to 56 per cent. of metallic ore.

The ore lies near the surface, being only covered with a thin layer of soil, and is therefore easily mined. No blasting is required.

The Nova Scotia Steel Company of New Glasgow are the lessees of four grants, each being one square mile, and the company has erected a costly plant, and is engaged in shipping the ore to New Glasgow, where, when mixed with Nova Scotia ores, the result is a pig iron producing a superior class of steel. About 200 men are employed at the mines, and up to the beginning of September 37,000 tons of ore had been shipped this season, while 10,000 to 15,000 tons more were expected to be shipped before the season closes.

In addition to the shipments to Nova Scotia, the ore is exported to the United States, and it is thought a profitable market will also be found in Germany. The red hematite in Great Britain increases the difficulty of sending the Newfoundland brown hematite to that market. We shall, therefore, await with interest the result of the shipment to Workington, referred to above.

HAMILTON PIG IRON.

The product of the Hamilton, Ont., blast furnace appears to have captured the market in Ontario, very little pig iron outside the Hamilton article now being heard of in Toronto and the west.

The iron is of a superior quality, and is giving good satisfaction for general foundry purposes. Manufacturers in Toronto and

other points in Ontario find the furnace convenient, and a great many of them have placed orders for their winter's supply.

The company is using some Canadian ore obtained north of Belleville, but its chief supply of this article comes from the Lake Superior mines. About 125 hands are now employed at the works in Hamilton.

WINDOW GLASS COMBINE.

A NEW combination of United States window glass manufacturers has just been effected. A meeting of the leading producers was held at Camden, N.J., at which about 90 per cent. of the factories organized the American Window Glass Company, with a capital of \$1,200,000.

The purpose of this company is not to produce but to handle the output of the different factories subscribing.

Pittsburg has been selected as the general distributing point, and all goods will be sent to this agency, from whence they will be sold, thus avoiding competition, cutting rates, etc.

It is estimated that the aggregate value of the plants represented is \$30,000,000, and that the output will be between four and five million boxes, valued at \$12,000,000. It is understood an attempt will be made to advance prices from 20 to 40 per cent. The higher duties of the new tariff have rendered this combination more possible, the imports having fallen from one-quarter to one-eighth of the consumption.

The combine does not handle plate glass, this article being produced and handled by three independent companies, the Pittsburg Plate Glass Co., the Standard Plate Glass Co. and the Pennsylvania Plate Glass Co. The Pittsburg company some time ago bought up all the rest of its competitors, but as the other two companies produce 20 per cent of the total output the Pittsburg concern is unable to hold prices against their competition.

ADVANCE IN IRON PIPE.

The price of wrought iron pipe has been advanced and wholesalers now quote as follows: $\frac{1}{4}$ -inch, \$1.87; $\frac{1}{2}$ -inch, \$2.35; $\frac{3}{4}$ -inch, \$2.87; 1-inch, \$3.87; 1 $\frac{1}{4}$ -inch, \$5.10; 1 $\frac{1}{2}$ -inch, \$6.38; 2-inch, \$9.25.

No change has been made in galvanized iron.

A HINT TO BUSINESS MEN.

THE municipal reform advocates of New York in bringing out Seth Low for the mayoralty have set an example which business men and men solicitous for good municipal government in Canada would do well to follow.

The man who is championing the cause of good municipal government in New York was selected for that purpose not merely because of his moral standing; but because to moral rectitude he has added superior business qualifications.

It is said that whatever some people touch turns to gold; but it has been proved beyond all peradventure that whatever Seth Low has touched has turned out to be a business success.

He had a college education, but he subsequently received a sound business training, and it is the education he received in the latter respect that has given him the reputation he possesses to-day; a reputation that is continental in its extent.

In a few months the electors in Canada will be called upon to choose men for mayorships, reeveships and councilships for cities, towns, villages and townships. Between this and that time the business men of the country should roll upon themselves the burden of searching out men of practical business experience to fill the various offices.

Municipalities, like mercantile institutions, should be managed on business principles. We know that at present this is the exception and not the rule. And it is because it is so that mismanagement is rife and taxation burdensome.

The business men are, to a great extent, responsible for this state of affairs. Very few take as live a personal interest in local municipal matters as they should, and fewer still are willing to allow the duties appertaining to the mayoralty, reeveship, aldermanship or councilship to be rolled upon them. And they are getting their reward in municipal mismanagement, and its accompanying evils.

The only surprise is that matters are not worse, for if a business was conducted with the same persistent absence of ordinary business instinct as are the affairs of the average municipality, its life would be short indeed.

ADVANCE IN WINDOW GLASS.

WHOLESALE dealers in window glass have this week advanced their prices. The advance is material, being from 10 to 30c. per box.

The first break in 100-foot boxes is now \$2.60 for star and \$3.80 for double diamond, compared with \$2.50 and \$3.50, respectively.

Stocks in Toronto, London, and other points in the west are understood to be light, and will be considerably broken before long. The bulk of the import orders are now in for this season. Prices in Belgium are much higher than they have been, and wholesale jobbers in Canada assert that a further advance in their figures is quite probably after navigation closes.

It appears that the glass manufacturers in Belgium have not been making money for some time. The brokers there, it is claimed, are wealthy and usually have the key to the situation, and are in the habit of squeezing the manufacturers. This year they have not been masters of the situation as completely as formerly, finding that after they

had booked orders the manufacturers demanded higher prices than they had reckoned upon. On account of this fact some houses in Canada have experienced more or less difficulty in getting their orders filled.

WIRE NAIL SITUATION.

The feeling in regard to wire nails is decidedly strong, and **HARDWARE AND METAL** has every reason for believing that a movement is on foot having for its object a further advance in prices. We should not be surprised if the change took place next week.

The movement seems to have its origin in the higher figures which are ruling on wire rods.

"The feeling," said a manufacturer, "among the jobbers and retailers is in favor of higher prices. Everything is too cheap at present to enable dealers to make a satisfactory profit on the turn-over. After all, the profits of jobbers and retailers are based upon a percentage. Therefore, the more goods cost the greater is the percentage the merchant makes."

WROUGHT IRON GOODS DEARER.

United States manufacturers of wrought iron goods, such as meat hooks, staples, hasps, hooks, etc., have advanced their prices about 10 per cent.

The advance, **HARDWARE AND METAL** is assured, is not due to the action of any combination. It is owing altogether to the cost of raw materials, which have advanced materially of late.

TIMES ARE BETTER.

"No doubt times are better," remarked a well-known Toronto wholesaler on Tuesday. "I am among the retail trade a great deal, and even those who are chronic pessimists are compelled to acknowledge that business is improving. And those," he concluded, "who have good stocks on hand are particularly happy, values having appreciated since they bought."

The other night J. H. Crow's hardware store, Welland, Ont., was broken into and about \$75 worth of silverware and \$10 worth of razors stolen. The thieves gained an entrance through a window.

THE ONLY WAY

to discharge an Iver Johnson Automatic Revolver is to PULL THE TRIGGER. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

AN IRON WILL.

"I CAN'T! it is impossible!" said a lieutenant to Alexander, after failing to take a rock-crested fortress. "Be-gone!" thundered the great Macedonian; "there is nothing impossible to him who will try." And at the head of a phalanx he swept the foe from the stronghold.

"You can only half will," Suwarrow would say to people who failed. He preached willing as a system. "I don't know." "I can't," and "impossible" he would not listen to. "Learn!" "Do!" "Try!" he would exclaim.

Napoleon in Egypt visited those sick with the plague, to show that a man who is never afraid can vanquish that scourge. A will power like this is a strong tonic to the body, and it will stimulate to almost superhuman undertakings. Such a will has taken many men from apparent death-beds, and enabled them to perform wonderful deeds of valor.

Aaron Burr was dangerously sick when he joined Arnold in leading the expedition against Canada. General Wolfe, sick with fever, led his troops up the heights of Abraham, defeated Montcalm and compelled impregnable Quebec to surrender. But five days before he wrote home to England: "My constitution is entirely ruined, and without the consolation of having rendered any considerable service to the state or without prospects of it."

After a sickness in which he lay a long time at death's door, Seneca said: "The thought of my father, who could not have sustained such a blow as my death, restrained me, and I commanded myself to live."

Prof. George Wilson, of Edinburgh University, was so fragile that no one thought he ever could amount to much; but he became a noted scholar in spite of discouragements which would have daunted most men of the strongest constitutions. Disaster, amputation of one foot, consumption, frightful hemorrhages—nothing could shake his imperious will. Death itself seemed to stand aghast before that mighty resolution, hesitating to take possession of the body after all else had fled.

At fifty-five years of age, Sir Walter Scott owed more than \$600,000. He determined that every dollar should be paid. This iron resolution gave confidence and inspiration to the other faculties and functions of the body and brain. Every nerve and fibre said, "the debt must be paid;" every drop of blood caught the inspiration and rushed to the brain to add its weight of force to the power which wielded the pen. And the debt was paid. In his diary he wrote: "I have suffered terribly, and often wished that I could lie down and sleep with-

out waking. But I will fight it out if I can." His imperious will worked on and on after it seemed that every other faculty had abandoned his mind.—Pushing to the front.

BOOKLETS, CATALOGUES, ETC.

The Sherwin-Williams Co., Montreal, paint and varnish makers, have issued their general price list of varnishes, and are to be congratulated on the neatness of their booklet, which is something hitherto unequalled for neatness and tastiness of design even by this firm. It is a dainty little work of 16 pages, each about one-quarter the size of a page of **HARDWARE AND METAL**, giving a complete list of the range of their product with prices, etc., and is bound in a heavy paper of dark green color, with white calfskin over-lapping an inch on both the back and the front covers. The title, firm name and trade mark are neatly printed in gold on the front page, giving an extremely pretty effect to the cover. The trade should write for a copy.

The Iver Johnson's Arms and Cycle Works, of Fitchburg, Mass., have issued the advance sheet of their 1898 fire arms catalogue, giving description and cuts of some of their guns and revolvers. A cut of their 1898 roadster bicycle is also given. As the Iver Johnson Co. is a standard, up-to-date firm, parties dealing in their goods should write for their catalogue, which can be had upon application.

WHY SWEAR AT ALL?

Washington and Beecher never swore but once, and Thomas Jefferson and U. S. Grant never swore. The Japanese and Indians have no oaths in their language. The North American Review once gave expression to the following: "The fierceness of men's profanity is in inverse ratio of the affluence of their ideas. The profanest men within the circle of your acquaintance are all afflicted with a chronic weakness of intellect. The utterance of an oath, though it may prevent a vacuum in sound, is no indication of sense. It requires no genius to swear." If this were known of all Americans henceforth there would not be any profanity outside our insane asylums. In his "Norwood" Beecher gives utterance to the following needed lesson: "There is much pious swearing. A bold man means swear, and says it. A timid man means swear, but says 'gracious.' All interjections are swearing—a kind of latent oaths. Legion is the name of methods used for breaking men of their profanity." Soldiers of our colonial days received for every oath 25 lashes. P. T. Barnum was cured of this habit by having to pay a fine of \$20.

PERFORATING IRON WITH A CLAY PLUG.

A curious illustration of the power of light matter to perforate more substantial substances when driven at a high velocity is described by The Engineer as having occurred in the Royal Arsenal a few days ago. In the course of experiments on firing gas in mines, conducted by Captain Cooper Key, a special gun is employed to do duty for a bore hole with a charge of high explosive, and pressed cylinders of raw dry clay 3 inches long and $1\frac{1}{8}$ inches in diameter are used to represent tamping. These "shots" are made to act in various mixtures of air, coal dust, gas, etc., and to stop the course of plug, etc. Eventually a cast iron target plate 1 inch thick was placed 25 feet in front, at an angle of 45 degrees, in order to break up everything into dust and throw it upward. After three or four shots with this arrangement the clay plug, weighing $7\frac{1}{2}$ ounces, perforated the inch iron plate, and the hole thus made has been steadily extended since. The familiar tallow candle passing through a door must hide its head before a $7\frac{1}{2}$ -ounce plug of clay perforating an iron plate an inch thick at an angle of 45 degrees. Doubtless the velocity must be tremendous. The calculated velocity for a hard cylinder of this weight and size to cut through an inch wrought iron at 45 degrees would be over 1,800 foot seconds. With cast iron and clay and the three or four repeated blows everything is so greatly altered that there is little more to be said than that the effect is remarkable and unexpected.

CENTRAL PRISON AND CORDAGE.

Editor **HARDWARE AND METAL**,—Referring to your remarks in last week's issue about the Central Prison binder twine industry, I notice that it is said to be the intention of the Ontario Government to add a cordage plant. If such is the case I certainly think they have been ill advised, as one cannot conceive of any class of the community being in favor of such a course after their unsatisfactory experience in binder twine.

Surely this industry has already been sufficiently harassed with prison labor at Toronto and Kingston, and the proposed free admission of binder twine from the United States, without placing the only branch of that very important industry in which a reasonable return for capital and free labor could be hoped for in direct competition with prison labor. Surely if such is the intention of the Government, the cup of the cordage manufacturers will be full to overflowing.

Yours, etc.,
Toronto, Oct. 20. **TRADE.**

EVOLUTION OF THE STOVE.

IN no other industry has there been greater improvement made than the one devoted to stoves and kitchen furnishings. If our forefathers of several generations ago could revisit the earth they would doubtless express much regret that they could not have lived in this progressive iron age when cooking is made comparatively easy by improved facilities in both stoves and vessels in which food is cooked.

At any and all times it must have been exceedingly difficult to cook in an open fireplace as our great grandmothers did; but in summer it surely was unbearable; the uses of gas and gasoline were undiscovered; therefore perspiring ancestors will be forgiven for confining their efforts to recipes of Spartan simplicity. It is only with improved utensils that very complicated dishes and menus are made possible.

The brick oven was some advance in the march of civilization, as it retained the heat more readily than the old plan of heaping coals on the vessel in which baking was done; but an oven could only be used for baking, naturally, and all stewing and boiling of food in kettles suspended from a crane was a trial to feminine patience, we can well imagine. For this reason we believe that the first cook stoves (however crude or inconvenient compared with those in use nowadays) must have been hailed with delight.

So many great changes have been made in stoves that one looks back with derision at the old-fashioned affairs where the ashes had to be removed by the lengthy and dusty process of knocking them out with a poker from the open front; also the perishable backs in the fire-box that were always falling to pieces, the utter absence of such an unheard of luxury as plate warmers, and last but not least the decided uncertainty of the drafts working properly so as to warrant putting food into the oven without having previously boiled it till done.

Notwithstanding the fact that cook stoves are now made with most improved drafts and methods of removing ashes, they are rapidly becoming superseded by ranges, especially in the cities where hot water pipes are needed; and now that gas ranges are made to heat water also they will undoubtedly be more universally sold than ever. A combination of these two cooking apparatus just placed on the market lately should prove good sellers in the retail city trade.

The great convenience of the newer kind of plate-warmers on ranges, those all in one section instead of two and with rolling top rather than the kind that are let down, are superior in every

The Sherwin-Williams Paints

Are made for doing all kinds of painting well. When a man or woman spends time and money in painting they want the work well done—done in a way that it won't require doing for a long time again.

Our paints are made to fill this demand. Sell them once and you make a customer—a satisfied customer—one who tells others and brings others. That's business building.

You can't build a paint business on cheap paints. You'll have to find new customers for them all the time. The old ones don't stay, or add others.

We'll help you, too, with our business methods to find customers and hold them. We increase our business by increasing yours. Our interests are mutual.

Will you work with us?

THE SHERWIN-WILLIAMS CO.
Paint and Varnish Makers

Walter H. Cottingham
Managing Director
Canadian Department.

**CLEVELAND
CHICAGO
NEW YORK
MONTREAL**

way, as they allow more dishes to be placed in them and they do not cause the doors to be in the way when the closet is open, as such an arrangement interferes with the movements of the cook in manipulating the vessels on the top of the stove.

There is some difference of opinion as to which is the best location of the reservoir—some prefer that it be on the right side and some the left. Circumstances—kitchen and location of range—largely determine the preferences.—Stoves and Hardware Reporter.

THE WINCHESTER BRUSH GUN.

We notice the Winchester Repeating Arms Co has just placed a new shotgun on the market, or perhaps it would be nearer correct to call it a new style of a gun, for it is the 1897 model Winchester repeating shotgun, which will be known as the Brush gun. It is 12 gauge, has a 26-inch barrel, and a shorter magazine than the first issue of the 1897 model, that of the Brush gun holding five cartridges. The stock is 13 3/8 inches long with drop of 1 1/4 inches at comb and 2 1/2 at heel. The grip has been reduced slightly and the buttplate is rubber. The gun weighs just seven pounds.

WHERE THE INVENTOR COMES IN.

It is a well-known fact that in a large number of cases the man who invents a good thing fails by some ill-luck to secure the pecuniary results of his labor. A particularly glaring instance of this class of misfortune came under my notice a short time ago, where an electrician invented an apparatus for cheapening and simplifying a certain manufacturing process. He perfected it in his laboratory, and then took out a provisional patent. Pressure of business prevented him completing the patent, and he then fell ill, and during his enforced absence from business the apparatus went wrong, and a workman was entrusted with the duty of putting it right. The latter, grasping the value of the invention, thoroughly mastered its intricacies, drew up the necessary specification, patented it, and almost at once sold a licence for its use to a number of firms for close upon £100,000. The inventor's share is thus limited to the free use of his own design, with, of course, the possibility of even having that contested in the law courts at some future date.—Ironmonger.

"That's a poor simile that compares an insolvent concern to a ship on the rocks."

"Why?"

"Well, the ship settles rapidly."

WISE COUNSEL RE MINING.

PROF. DEKALB, the newly appointed professor of mining engineering at Queen's College, Kingston, during a speech delivered a few days ago at the opening of the college, gave some wise counsel in regard to mining matters.

He said that England's industrial and commercial supremacy was attributed largely to her possession and intelligent use of mineral resources, and the future of the United States was, he said, bright owing to her mineral resources; to the same cause was due the industrial growth of Germany. "The possession of mineral resources, wisely and skilfully utilized, is to a nation much what the bony skeleton is to the living organism," was the sweeping claim with which the professor clinched this part of his argument. He gave an interesting account of the mining operations of South America, where the possession of immense mineral wealth had amounted to a positive injury, and concluded his address with a warning to the people of Ontario lest their wealth should turn out a menace. He said on this point: "I can explain best by an illustration. In the southern United States there are many metalliferous deposits, chiefly gold, copper, iron and zinc, with some prospects of tin and chromium. In addition there are wonderful deposits of coal, of phosphate rock, of abrasives, of clay and kaolin and building stone of almost every variety and degree of merit. All these, combined with a salubrious climate and soils of rare fertility, give to the south the capabilities of self-sufficiency to an extreme degree. But for many decades her efforts were painfully misdirected. Her riches were not like those of Peru and Mexico. They would not yield themselves to inexperienced workers, save in a few cases where the upper oxidized 'gossans' of gold mines rewarded the crude operations of the arrastra and the Chilian mill, and I am sorry to say the trip-hammer stamp mill, serving consequently to excite false hopes in others and to retard the real and the profitable investments.

"NEGLECT OF PRUDENT MEANS

of exploiting her resources did retard the south for a whole generation at least. There grew up an unfortunate confidence in local practitioners, whose only experience had been obtained within this narrow field, and it was only after a few progressive men had shown what could be accomplished by a higher order of talent that the great industrial development of the south began. Her problems are, I fancy, much like your own. Ores of many kinds are widely disseminated; in the cases of copper and nickel, and in perhaps the greater number of gold mines on which the continuance of gold produc-

tion rests, they are what we would term in mining parlance 'low grade propositions,' which is almost tantamount to saying that they are of large extent, and hence suitable as a basis for important permanent enterprises. But there are difficulties arising from their tenor and composition with which only mechanical ability and chemical knowledge can successfully grapple.

It is the function of your School of Mining to equip men to deal with these problems and bring about the well-rounded industrial condition which Canada needs, when she can feel the strength which comes only from stimulating and supplying the demands of a highly organized body politic through the operation of internally acting forces. Take care to

PRESERVE A PROPER BALANCE

between well-directed and diversified agriculture and well-directed and diversified mining, and the manufacturing and the rest will grow of necessity under the quickening influence of these two springs of wealth. The existence of this School of Mining in Kingston is evidence that Ontario has reached a point where mining has ceased to be regarded as a basis merely for speculation of that sort to which the name of gambling is more properly applied. I regret to say that in most parts of the world to-day the motive which leads the majority of men into mining investments is exactly the low, debasing one which leads men into a game of poker. But states and provinces do not found institutions of learning to teach young men to manage an adjunct to a gambling operation. A school of mining exists as a training school for a legitimate business, one which becomes illegitimate, unsound, suitable for gamblers only, when not carried on upon correct principles.

"THE RISK IN MINING

when conducted under competent management sink into insignificance when compared with those incident upon the establishment of a manufacturing or transportation enterprise. It is the business of your School of Mining to do its part in aiding the development of the Canadian mineral industry by sending into the field earnest, able men, filled with a high sense of responsibility to their clients and their country, who shall, if you will allow the simile, turn the potential power of your undeveloped resources into kinetic energy to further vitalize and strengthen the commonwealth."

A despatch from Vancouver, B.C., says that during the quarter just closed the value of exports to the United States from Vancouver Consular District amounted to \$702,906. Of this sum \$217,226 was matte, \$311,403 galena, \$94,508 bullion.

ENTERPRISING, AT ANY RATE.

Yukon mining stocks are being pushed in far-off Japan. One company, whose head office is in Toronto, has a three-quarter column advertisement in The Japan Daily Advertiser, published in Yokohama, inserted by the agent for Japan and China who resides in Yokohama.

The company is to be commended for its enterprise, which reads a lesson to mercantile companies who are not as enterprising.

REVOLVER FOR BICYCLISTS.

We present herewith a picture of the new cycle revolver made by the Iver Johnson's Arms and Cycle Works, of Fitchburg, Mass. The revolver is designed especially for the use of cyclists, and is meeting with much favor amongst them, as it is a good protec-



tion against vicious dogs or the highwayman. On account of its small size it can be easily carried in the pocket, and like all other "Iver Johnson" automatic revolvers, this weapon cannot be discharged except by pulling the trigger, thus making accidental discharge impossible.

SIMPLICITY VERSUS VERBOSITY.

A plain statement is always preferable to an ambiguous one. Hence, in preparing your advertising matter it is a good plan to use short sentences in preference to long and involved periods. If you are inclined to doubt this, just notice the kind of language a salesman uses when he sells you the next carload of goods. Have your stenographer take down the conversation and write it out for you so you can study it. In the whole conversation you will probably not find one sentence spoken by the salesman that contains as many as fifteen words, and few that contain as many as ten. Not only will the sentences be found to be short, but the words employed will also be short. Polysyllables are rare in language which sells goods—one, two and three syllabled words are used mostly. An advertisement should tell the story in about the same way that a first-class salesman does; and there is no reason why every published announcement should not be just as terse and just as convincing as the best language used by the best salesman.—Stoves and Hardware Reporter.

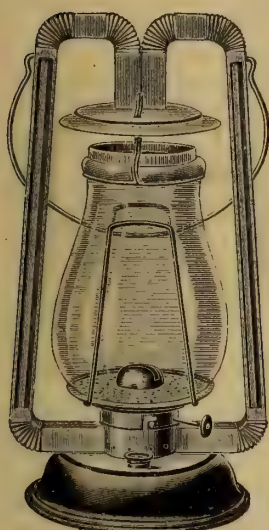
H. S. HOWLAND, SONS & CO.

WHOLESALE HARDWARE
MERCHANTS.

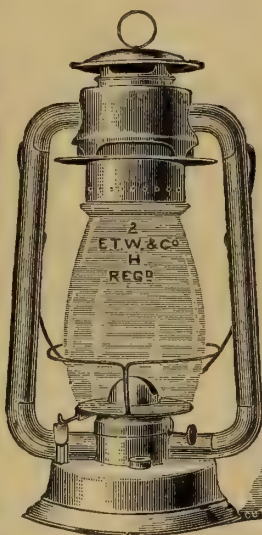
... TORONTO

LANTERNS

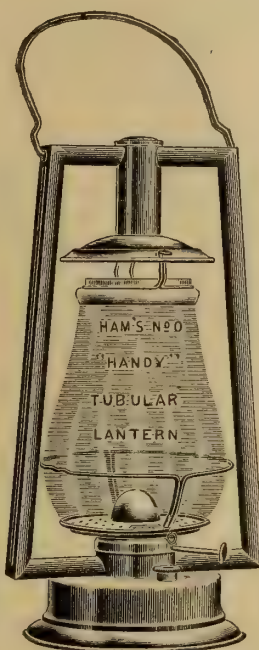
*The Best Burning and Finest Finish
Tubular Goods in the Market.*



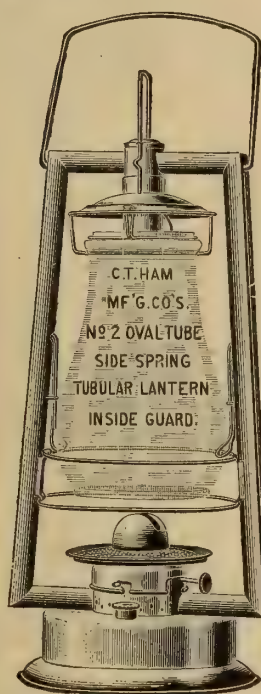
STONCS
Fin. Plate



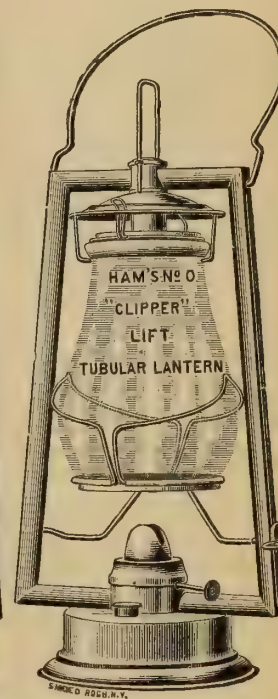
COLD BLAST
5/8-in. and 1-in. Wick



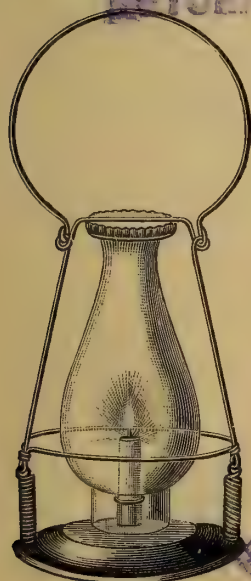
HANDY



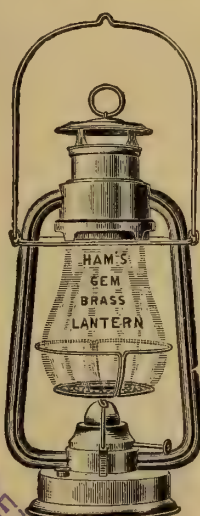
SIDE SPRING
5/8-in. and 1-in. Wick



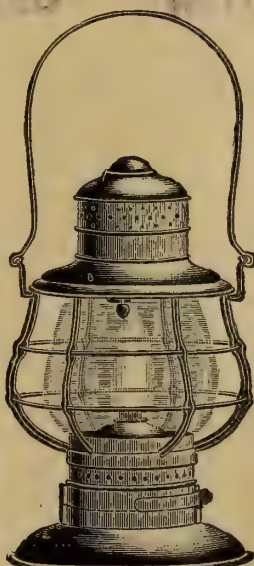
CLIPPER LIFT



SAFETY CANDLE

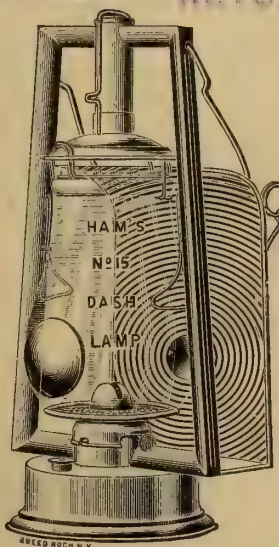


GEM BRASS
GEM NICKEL

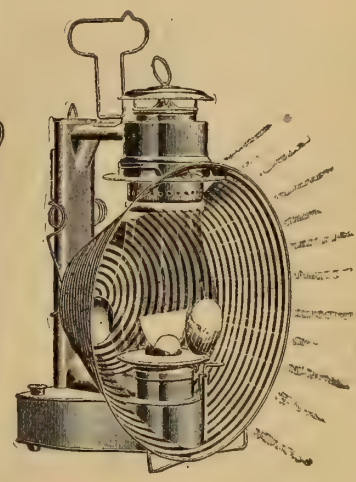


RAILROAD 39

Lard Oil Burner
Coal Oil 5/8-in. and 1-in. Wick.



NO. 15 DASH



SEARCH LIGHT

Our Prices are Right...

GRAHAM Cut and Wire Nails are the Best.

... Orders Filled Promptly.

H. S. HOWLAND, SONS & CO., TORONTO.

PIG IRON PRODUCTION INCREASING.

THE IRON AGE, in reviewing the pig iron production, says: The monthly pig iron statistics furnish eloquent proof of the expansion in the demand for iron during the past few months. From a weekly product of 165,000 tons on August 1, the capacity at work has risen to 200,000 tons, and yet stocks have declined over 200,000 tons, of which by far the greatest quantity was absorbed during September. It is quite clear, therefore, that consumption lately has expanded even more than production, so that there is nothing alarming in the known fact that additional furnaces are getting ready. As a matter of fact, nearly every well-equipped furnace in the territory west of the Alleghany Mountains and north of the Ohio River will be running by November 1. That means that nothing more is to be expected in the way of expansion from that section.

The south is in a position to produce more heavily, so far as furnace equipment is concerned, but it will not be quite so easy to provide the necessary fuel and ore.

The east, of course, has many plants idle, and a considerable number are in shape to start operations. A good many stacks are carried along in the lists because they have not been actually dismantled. They might as well be in the South Sea Islands, so far as their ability to make iron at a profit is concerned. We do not believe that the real live capacity in the country is much above 225,000 or 230,000 tons a week. We are not likely to reach the necessity for such a total, with the winter before us, and the usual slackening of consumption during that season.

The weekly capacity of the furnaces in blast on October 1 compares as follows with that of preceding periods:

	Furnaces in Blast.	Capacity Per Week. Gross tons.
October 1, 1897.....	171	200,128
September 1.....	161	185,506
August 1.....	152	165,478
July 1.....	145	164,064
June 1.....	146	168,380
May 1.....	146	170,528
April 1.....	153	173,279
March 1.....	159	169,986
February 1.....	154	162,959
January 1.....	154	159,720
December 1, 1896.....	147	142,278
November 1.....	133	124,077
October 1.....	130	112,782
September 1.....	145	129,500
August 1.....	173	157,078
July 1.....	191	180,532
June 1.....	194	182,220
May 1.....	196	179,368
April 1.....	200	187,451
March 1.....	207	189,583
February 1.....	215	198,599
January 1.....	241	207,401
December 1, 1895.....	242	216,797
November 1.....	239	217,306
October 1.....	232	204,414
September 1.....	215	194,029
August 1.....	200	180,525
July 1.....	185	171,194
June 1.....	172	157,224
May 1.....	171	159,554
April 1.....	171	158,132
March 1.....	173	159,979
February 1.....	179	163,301

In comparison with previous months the

record of the coke and anthracite and charcoal furnaces stands as follows in gross tons:

	Number in blast.	Capacity per w/k.	Fur'ces in blast.	Capacity per w/k.
October 1, 1897.....	151	195,492	20	4,636
September 1.....	140	169,951	21	4,555
August 1.....	132	161,375	20	4,603
July 1.....	131	161,170	14	2,804
June 1.....	131	165,059	15	3,321
May 1.....	133	166,799	13	3,729
April 1.....	137	167,911	16	5,368
March 1.....	138	164,561	18	5,125
February 1.....	136	157,815	18	5,144
January 1.....	135	154,264	19	5,456
December 1, 1896.....	128	137,096	19	5,182
November 1.....	112	119,094	21	5,083
October 1.....	105	105,520	24	5,562

The position of stocks, sold and unsold, as reported to us October 1, was as follows, the same furnaces being represented as in former months:

Stocks—	May 1.	Aug. 1.	Sept 1.	Oct. 1.
Anthracite and coke...	856,892	756,955	7,5961	538,401
Charcoal.....	179,747	172,003	158,149	153,126
Totals.....	1,036,639	928,958	864,110	691,527

A NOVEL UMBRELLA.

The famous Eiffel Tower and the celebrated Ferris Wheel are to be rivalled at the Omaha Exposition by the greatest umbrella of modern times. Standing upon a bluff facing the Missouri River, it will carry passengers in its cars to a height of 575 feet above the level of the river. The umbrella will be anchored in a stone foundation 30 feet deep by 75 feet square. Its structure will be of iron and steel, rising 350 feet above its foundation. With a diameter of 40 feet, it will have a circumference of 126 feet. On the sides of the standard, running from the bottom up, will be 40 rails, forming ten tracks for the lower platform to move up and down. On this platform will be a circular track on which another platform is to revolve, the latter platform holding the standard which supports the arms of the umbrella.

The arms are to be 110 feet in length, at the extremities of which the cars are to be suspended. From the outer end of the arms cables will reach to the top of the standard. The cars will be constructed on the same principle as those of the Ferris wheel, built of iron and steel, and will hold 40 passengers each. There will be 16 of these cars. The lower platform will also be used by passengers, having a carrying capacity of about 200. This platform will rise to the height of 240 feet.

The whole machine will be operated by electricity. Each car will be lighted with different colored electric lights, and on the top of the standard will be a searchlight, which the Exposition company will provide. The umbrella will make three trips an hour.

A preacher was holding forth to a wearied congregation when he noticed a boy in the gallery pelting the people with chestnuts. The clergyman was about to rebuke him when the youngster bawled out at the top of his voice, "You mind your preaching and I'll keep the folks awake."

A RETAIL ORGANIZATION.

The retail merchants of South Dakota have organized in an association. We have received a copy of the report of their meeting and the constitution and bylaws of the new body. The object of organization, as set forth by the opening address, is for the purpose of confining trade within the state to its proper channels and for reforming such abuses as exist in such ways as the association think best. The speakers, without exception, disapproved of endeavoring to secure legislation to hurt department or any other stores, all agreeing it to be a better plan to improve their own businesses by doing away with the exchange of goods for farm produce, by doing a larger, if not a total, cash business and by the education of the consumer to loyalty to home enterprises and to the fact that supply houses are not cheaper than the up-to-date retail store.

The association passed the following resolution: Resolved, that we recommend that merchants do not purchase any goods, wares or merchandise from any jobber, broker or manufacturer who may be known to sell or supply goods, wares or merchandise to "supply" and "catalogue" houses or to sell at retail.

The secretary, in his preface to the report at this meeting, states that a bureau of information has been opened in the office of the secretary for the purpose of disseminating all knowledge helpful to the trade and invites all members to correspond freely with the bureau.

ANOTHER "IVER JOHNSON" DEAL.

It is currently reported that the Iver Johnson's Arms and Cycle Works have about completed arrangements for the lease of a large warehouse and offices in the hardware section of New York city. If such is the case, it is but another example of the thoroughly progressive spirit which animates this concern.

The bicycle and fire arms trade of New York would doubtless welcome such a valuable acquisition to its already large representation of successful manufacturing interests.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

A. ALLAN, President.
O. GRAVEL, Sec.-Treas.

FRS. SCHOLÉS, Man. Dir.
J. J. MCGILL, Gen. Mgr.

Canadian Rubber Company

OF . .
Montreal
Toronto
and
Winnipeg
Capital, \$2,000,000
. . Manufacturers of the . .

Highest Grade Rubber Belting

MADE IN AMERICA.

Specially Adapted for Use in Lumber Mills,
Pulp Mills, Etc.

Western Branch : Cor. Front & Yonge Streets, **TORONTO**
J. H. Walker, Mgr.



Established 1860 ♦ Incorporated 1895

OIL HEATERS

New Process

Handiest and most economical Oil Heater made. It will heat a 20-foot room in zero weather at a cost of about 2c. per hour.

Pure white flame,
smokeless and odorless
Removable oil fount.

General Agents for Canada

The Thos. Davidson
Mfg. Co., Limited
. . MONTREAL

COAL HODS **STOVE BOARDS**
FIRE SHOVELS **STOVE PIPES**
ELBOWS, ETC.

Bertram, Wilson & Co.

Having bought Bertram & Co.'s stock of Hardware (considerably under cost), we will sell the following lines (at reduced prices) :

AXES = Dundas Edge Tool Co.

FILES = Toronto File Co.

SAWS = Burns Saw Co. and Disston Cross-Cut.
Disston and Bertram & Co. Hand Saws.

We can also offer the Hardware Trade at low figures—

Anvils, Vises, Picks, Mattocks, Crowbars, Machinists' Taps, Dies, Drills and Tools ; Leather and Rubber Belting ; Asbestos, Soapstone and Rubber Packing.

Letter Orders will receive Prompt Attention.

BERTRAM, WILSON & CO. 53 Yonge Street

IRON, STEEL, HARDWARE AND
BICYCLE MERCHANTS.

Toronto



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

CYCLE TIRE GUARANTEES.

WITH the considerable reduction in selling prices which have annually been made, the pneumatic tire manufacturers have, during the past season, found their guarantee as now worded and interpreted more than they can profitably shoulder. The result has been that the United States Rubber Tire Association recently came to the conclusion to do away with their free repair shops after January 1 next, making the guarantee read as against imperfections in material or manufacture only, the same to hold good for the calendar year as at present.

The Canadian tire manufacturers are in favor of coming to a similar understanding, and it is probable that a meeting of those interested in this branch of the cycle trade to consider the question will shortly be held.

The makers in presenting their side of the case set forth that the making of free repairs for punctures and any and all kinds of injury is anything but a business contract. "Might just as well," says one, "expect that a shoemaker should patch up free the shoe of a man who stubs his toe against a nail on the sidewalk and makes a tear in the leather." They also aver that the greatest trouble in tires arises through the carelessness of riders, probably 50 per cent. of all repairs coming under this class, leaving 40 per cent. for unavoidable punctures, and tires cut by rims, and 10 per cent. for injured valve stems.

Deprived of free repairs, riders would naturally take pains to learn for themselves how to go about fixing up a puncture, and in this they would benefit when they run up against an obtrusive nail or tack on the road. At present there are hundreds who, trusting implicitly to their guarantee, do not take the pains to master even the rudiments of the repair art, and a puncture when away from home, therefore, throws them in a state of blank despair.

The discontinuance of free repairs would also be a boon to the bicycle repair man,

and, speaking for the riders of independent disposition, we are of the opinion that they would bear no resentment towards the makers for their decision to no longer present them with something for nothing.

THOSE STEAMSHIP SUBSIDIES.

THE question of subsidies for carrying the Canadian mails across the Atlantic during the winter months is still undecided. In fact, it has become more complicated rather than otherwise.

The Government, it will be remembered, decided that no subsidies should be given to steamers which made United States and not Canadian ports their winter terminus. And tenders were invited under these conditions. A few days ago offers but not tenders were received from the Allan and Dominion Companies.

Their offer is to jointly give a partial service to St. John direct, but they maintain that the traffic is not such as to warrant their giving a weekly service as asked for by the Government. The very best, we are told, the companies will do is to provide a fortnightly service to St. John direct, and running each alternate week, as they do at present, to Portland, making Halifax a port of call.

The position the Government has taken is the right one. Canada has already too long contributed to the upbuilding of United States ports. But whether they can maintain it and still be serving the best interests of the country is another matter.

The people of Canada are, as far as we know, unanimously in favor of subsidies being granted only to such line or lines as will agree to make a port in this country the terminal port. And only upon the ground of expediency should the Government even compromise on the position it has taken.

In addition to the American withdrawals the Bank of England has lost sovereigns for shipment to Egypt recently.

A CHANGE IN A WHOLESALE FIRM

AN important change has just been made in the wholesale hardware and metal firm of George H. Bertram & Co.

As everyone knows, Mr. George H. Bertram is the head of the Bertram Engine Works Co., Limited, which, during the last few years has earned such a wide reputation as a steamship, engine builder, etc. Finding the duty of managing the engine works and the hardware business too onerous, he decided to withdraw from the latter. His successor is his son, Mr. John H. Bertram, who has associated with him a Mr. Wilson, and the style of the firm becomes Bertram, Wilson & Co., as will be noticed in the advertisement on page 11. The new firm bought the stock at a low figure on the dollar and intend to allow customers, old and new, the benefit of it.

Mr. John H. Bertram, the senior partner and active member of the firm, has been employed in his father's warehouse ever since he was a boy, and is, therefore, thoroughly conversant with the business. He began at the foot of the ladder, being compelled to do what any other boy would have had to have done. After passing through various positions he, for a few years, represented the firm on the road, while for the past three years the management of the business has largely fallen upon him.

The new firm, like its predecessors, will make a specialty of lumbering, mining and manufacturers' supplies, besides carrying on a general business in heavy hardware. Last year the firm also did a large trade in bicycles, and it is now making arrangements for next season's business.

The old firm of Bertram & Co. has had an existence for a number of years. It located in Toronto eighteen years ago and for several years prior to that business was carried on in Peterboro and Lindsay.

It may be noted that the fact that the Bertram Engine Works Co., Limited, have contracts enough on hand to keep it employed for nearly two years expedited the withdrawal of Mr. Geo. H. Bertram from the firm of Bertram & Co.

Tin Plates.

"MUREX"

IC. 20 x 28

1 x 20 x 28

For Furnace Work.

"VULTURE"

All sizes and
weights.

Good Bright Charcoal.

"M. L. S."

All sizes and weights.

Best bright charcoal, double
dipped and tissue packed.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

A FIRE INSPECTOR

reports that more policies covering mills, warehouses, etc., are cancelled by reason of lack of fire pails than by any other reason. And yet it costs so little to equip premises with indurated fibreware round bottom fire pails made by . . .



The E. B. EDDY CO., Limited

HULL, MONTREAL and TORONTO.

TAKE IN THE TRAVELERS.

ONE of the most important moves of the Wisconsin Association was that of admitting to honorary membership all traveling salesmen selling the regular hardware trade. In this one move alone the association have builded better than they knew.

Using a stanza cut from a trade paper, and changing a word:

"The word of a maid—empty air! 'Tis naught!
And the word of a man—'tis a thing to be bought;
But when traveler to merchant has said—"It is done,"
'Tis a law, and a bond, and a judgment in one."

The commercial traveler is neither intrusive nor obtrusive; he knows what he knows, and knows it as well as any one knows it, and don't care who knows it, but he is not forever and eternally thrusting his knows upon you. He comes to you with a mission and a duty to perform. He meets you with the cordial grasp of friendship, and upon the completion of his work he leaves you in peace with his blessings. Seldom one becomes your instructor or presumes to dictate your business. If for one moment he shall presume to be either, he, too, soon finds his level. He comes with no great heraldings, and departs in the same dignified manner. He may think a whole lot, and know a whole lot, but he reserves both his knowledge and thoughts and thrusts them not upon you.

The commercial traveler would as soon live in a country without a flag as a country without commercial interests. He is as solicitous of one as the other, and would fly to the rescue of either, or both. No flag, no country. No commercial interests, no country. Coupled directly with the retailers' interests are those of the commercial traveler. You may call him (the C.T.) the commercial journal looking forward to the retailer and backward to manufacturer and wholesaler. He is the happy medium standing in the middle ground looking both ways for the protection of trade and the building up of commercial industries.

In boom times he may become careless and somewhat indifferent. Under depression he becomes studious, thoughtful and energetic. The commercial traveler is, or ought to be, broad-minded. He comes in contact with all peoples, meets with all dispositions, all temperaments. To-day it is the plethora, to-morrow the pessimistic, and he accommodates himself to all the conditions, prosecuting his work in a manner born unto himself.

THE WELSH TIN PLATE INDUSTRY.

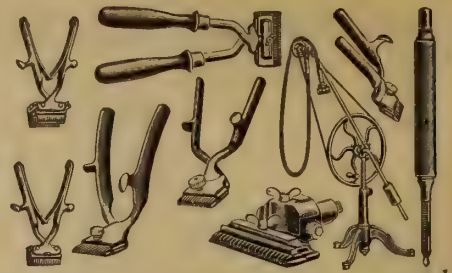
The latest returns of the British Board of Trade show that in 87 tin plate works 272 mills were at work as compared with 278 at the end of June and 308 at the end of July, 1896. The number of works giving full employment decreased during July from 39

(with 212 mills) to 36 (with 191 mills), while works giving partial employment increased from 16 (with 66 out of 99 mills at work) to 18 (with 81 mills out of 116 mills at work). The number of works entirely idle at the end of July was 33 (with 172 mills) as compared with 32 works (with 168 mills) at the end of June. The continuance of trade disputes again accounts in some measure for the stoppage of mills. Returns received from owners of 55 tin plate works show that 10,772 persons were employed at the end of July, being 265 less than at the end of June and 1,975 less than at the end of July, 1896.

THE LATEST CUT IN SILVER.

"Yes," said Mr. Charles T. Cook, of Tiffany & Co., "as you have noticed in the papers, we have reduced the price of our current patterns of sterling silver forks and spoons to one dollar per ounce. This is the lowest price manufactured silver has ever retailed at either in this country or abroad, and it is really much lower than appears in the mere statement of \$1 per ounce. Take, for instance, tea-spoons at \$10 or \$11 per dozen; that allows about \$4 for labor, waste, engraving, and retailers' profits, while there is no margin left to pay for the wear and tear of machinery and the expensive dies. Although forks and spoons are rolled and stamped out with dies, it is by no means all machine work. The work of the die is merely the initiative; the art of bringing out the detail of the pattern, burring out the tines of the forks, smoothing the edges and finishing, is all skilled hand-work. Our Olympian pattern once brought \$2.50 per ounce; to-day the Olympian and Indian Chrysanthemum patterns sell at \$1.35 per ounce; and while silver has depreciated, the cost of labor has not, for the price of skilled work is steadily growing stronger, and commands more to-day than a few years ago.

"I do not believe that any political act of our Government or the countries abroad can give silver any permanent appreciation; at best, it could only have a temporary effect, for, like the price of wheat and labor, it is governed by the irrevocable law of supply and demand. The supply of silver is practically unlimited, and, were silver mining suspended, the supply would still not be entirely cut off, for silver is a bi-product of many other minerals. It is said there is very little gold mined without silver in it, and that the residue of lead and copper mining brings anywhere from \$20 to \$600 worth of silver to the ton. The depression of silver has, of course, stimulated the sale of silverware and greatly increased the volume and variety of products, and the profits of the manufacturer have been materially reduced; but this may be offset, as there is every indication of a large business this fall, with a demand for more substantial products than those which have had a ready sale the last two or three years."—N.Y. Journal of Commerce.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

Are you ever asked for

Stencils or Steel Stamps?

Send for our Catalogue of Stamp Goods. We make everything in this line.

HAMILTON STAMP & STENCIL WORKS,

Hamilton and Toronto.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

WESTERN

Incorporated 1861.

ASSURANCE COMPANY

Fire and Marine

Capital, subscribed	\$2,000,000.00
Capital - - -	1,000,000.00
Assets, over - -	2,320,000.00
Annual Income -	2,300,000.00

Head Office: **TORONTO, ONT.**

Hon. Geo. A. Cox, President. J. J. Kenny, Vice-President
C. C. Foster, Secretary.

E. T. Wright

**E.
T.
W
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T
& CO.**



H. G. Wright

**H
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ONT.**

PROMINENT among the many industries of Hamilton stands the firm of E. T. Wright & Co., whose goods are known from the Atlantic to the Pacific. Beginning a few years ago in a small way, and manufacturing only a few special lines, they have, by diligence and careful attention to the details of their business as well as to the wants of the trade, built up a large and yearly increasing business. Last year they found it necessary to make a large addition to their factory, which is situated on the corner of Kelly and Cathcart Streets, and still the cry is for more room.

In a short article like this it would be almost impossible to enumerate the goods that are manufactured and handled by this firm, but a post-card to them will ensure the return of a catalogue which shows the extent and variety of their goods.

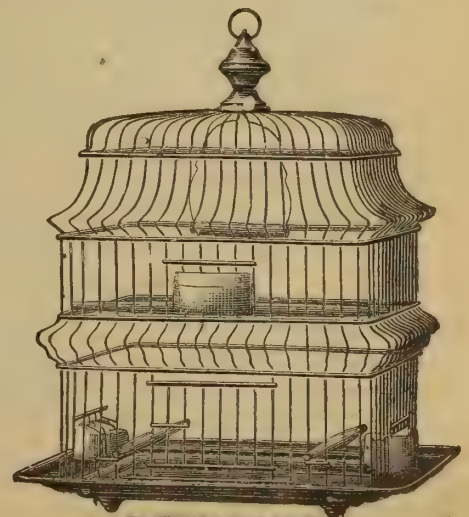
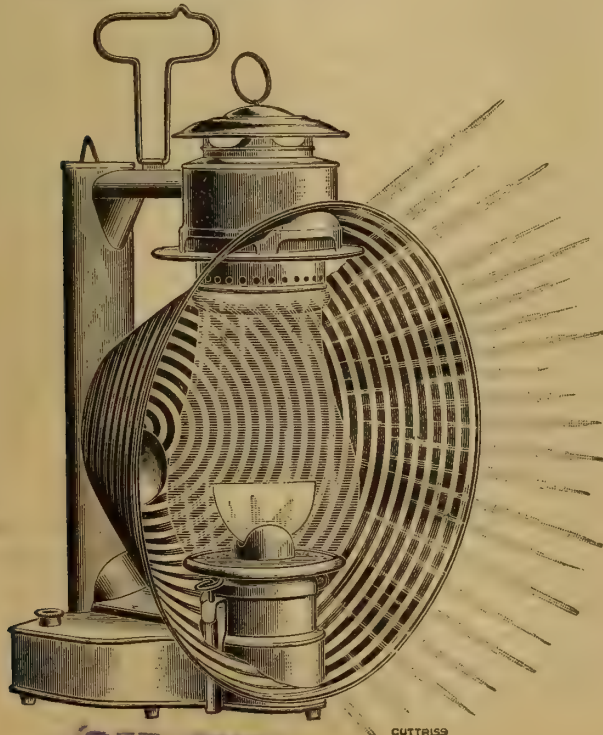
In addition to a full line of **Plain, Stamped and Retinned Ware**, as well as Japanned Tinware, they manufacture a number of Specialties, among which are **Bird Cages, Flour Sifters, Tubular and Cold Blast Lanterns.**

Of the last-mentioned article, their sales this year have been very large, and for the last three months they have been working till ten o'clock every night, and even then they have not been able to keep up with their orders. With regard to their **Cold Blast Lanterns** we can safely say that the pattern they make is the "Best in the World," and as they have a special design of Globe also, purchasers may feel assured that they are getting best value for their money when they buy one of "**Wright's Cold Blast Lanterns.**" Their line of **Bird Cages** is very large and varied, and the trade can be supplied with an assortment equal in style and finish to any made anywhere in the United States.

In addition to the many lines of their own manufacture, they carry a large stock of Table Cutlery and Plated Goods, Stove Boards, Coal Hods, and the thousand and one articles that are required in every well regulated household. The members of the firm are E. T. Wright and H. G. Wright, both of whom are still young men and are well known to business men as worthy representatives of the manufacturers of the Ambitious City.

**Tinsmiths'
Tools**
From Best Makers.

**Asbestos
Stove Lining
Furnace
Cement
Crown Stove
Polish
Sun Stove
Paste
Enameline
Etc., Etc.**



RETURNED

Oct 25/97

RETURNED

Oct 25/97

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Oct. 22, 1897.

HARDWARE.

THE generally firm tendency of values in hardware has been fully maintained, and buyers are operating with more freedom this week in many lines. This applies to cut nails, wire nails, horse nails, horseshoes, all of which have contributed a good volume of business. The advance in sisal cordage also induced freer buying, while shot and lead pipe, though not quotably changed, have a markedly firm tendency.

BARBED WIRE—Very little doing in barbed wire. Prices are held firm at \$2.50 f.o.b. Montreal.

PLAIN WIRE—Few lots of plain wire are moving, discounts being 30 and 10 off.

WIRE NAILS—The demand for these since the advance has been rather better, and quite a few orders have been booked, both for prompt and future shipment. We quote \$1.85 to \$1.90 f.o.b. Montreal.

CUT NAILS—There is a fair demand for cut nails also. The base price is \$1.85 f.o.b.

Montreal, Toronto, Hamilton and London, with a rebate of 10c. per keg to regular retailers.

HORSE NAILS—There is a fair enquiry for these, discount being unchanged at 50 per cent.

HORSESHOES—In good enquiry. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—A moderately good movement is noted in these. Discounts are as follows: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Trading is quiet, with discounts unchanged at 12½ per cent.

BOLTS—There has been a steady enquiry for these. Discounts are as follows: Car-

riage bolts, ¼ and 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—Prices for these are unchanged, with a fair business doing. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—Unchanged, with a moderate business doing.

FILES—Quiet and unchanged. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—In good demand at the advance. Stocks are light, and some difficulty is experienced in filling orders for this reason. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—Business inactive.



YUKON...

TRIPLE HEATER

The most complete and effective heater made in the Dominion. Takes 30-inch wood.

Size of fire door opening 11 x 14¼ in. Shipping weight 460 lbs. Large hearth. 4-piece sectional linings that can be replaced through front door Direct or indirect draft. Fire travels the entire length of stove three times before entering smoke pipe. Flues easily cleaned from front. Two very effective hot air flues that will distribute heat equally; one cannot rob the other. Strong leg base and nicked rails packed inside of stove for shipping.

List Price - \$33.68

Order a sample early

If you want your goods quick, order from us

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver

Henry Wright & Co.'s ANVILS and VISES

ARE

RIGHT in quality
in pattern
in price

A good assortment in stock.

A. C. LESLIE & CO.
Montreal
IRON AND STEEL, ETC.

Fire Bricks
Drain Pipes
Contractors' Supplies
F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



“THE LEADER”
Ask your dealers for
Sold everywhere

THE DOWS'WELL MANUFACTURING CO., Limited
HAMILTON, ONT.

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moc-casins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

BUILDING PAPER—Quite a fair trade is passing in this line. We quote: Plain building, 25c., tarred lining, 35c., and roofing, \$1.30 to \$1.40.

HOLLOW WARE—All kinds of tinware, ironware, both plain and enamelled, are well enquired for.

HINGES—Quiet and steady. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—There is a brisk business in cutlery.

SPORTING GOODS—Guns, rifles and ammunition contribute a good trade.

SHOT—In fair demand. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent. trade discount.

CEMENT—There has been a fair demand for both Belgian and English. We quote: English \$2.10 to \$2.20, ex wharf, and Belgian \$1.85.

FIREBRICKS—Continue active and steady at \$16 to \$21 per 1,000, as to brand.

METALS.

There is a good movement in all heavy metals; supplies are light and according to all accounts quantities on the way are less than usual for the season. Prices, therefore, are firmly held all round.

PIG IRON—At the advanced prices there has been a good enquiry for pig. We quote: No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands \$18 to \$18.50.

BAR IRON—Quite a demand for bar iron has prevailed during the week and a good many car lots are moving. We quote the jobbing range firm at \$1.40 to \$1.50.

BAND IRON—Prices are steady on the basis of \$1.70 with a good enquiry.

HOOP IRON—The same remark applies to this line which we quote steady at \$2.25 to \$2.35.

SHEET STEEL—A fair trade is doing with the base price \$2.35.

SHEET IRON—Continues in very good enquiry and prices are firm on the basis of \$2.25.

GALVANIZED IRON—There is a good demand for these and stocks are light. Values are held very stubbornly at \$4 to \$4.15 for Queen's Head.

TINNED IRON—Unchanged on the basis of 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges with the usual extras.

LEAD PIPE—This is very firm in tone, though there is no change in the quotations. We quote lead pipe 7c. per lb. and composition and waste pipe 7½c., subject to a discount of 27½ per cent.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

. . MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
" "	Rivet Iron	AVB
" "	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
" "	Rivet Iron	AXB
" "	Stay Bolt Iron	AXB
" "	Hammered Iron	AHB
" "	Charcoal Iron	ACB

Tyre, Sleigh Shoe,
Axe and Rivet STEEL.

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

PORTLAND

CEMENTS

FIRE BRICKS
SEWER PIPES
CALCINED PLASTER
WHITING

Large Stocks.

Lowest Prices

Ask For Our Quotations.

W. McNALLY & CO. - MONTREAL

PIG LEAD—This metal is firm in outside markets. We quote price firm at \$3.85.

INGOT TIN—There is a moderate trade in tin, with prices steady at 16c.

INGOT COPPER—Unchanged, with a moderate enquiry at 12 to 12½c. per lb.

SHEET COPPER—There is a fair trade. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There is a fair enquiry for these and numerous car lot transactions are noted. We quote the jobbing range \$2.10 to \$2.25.

TIN PLATES—There is a fair enquiry for these. We quote: Coke I. C., \$3 to \$3.15; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.80.

TERNE PLATES—There has been a fair enquiry for terne plates, with prices firm on the basis of \$6.

COIL CHAIN—The demand is good on the basis of \$2.85 for ⅝ up.

SHEET ZINC—The demand fairly active and prices firm at 5 to 5¼c.

SOLDER—In fair enquiry at 11½c.

SPELTER—Fairly active in a jobbing way at 4¾c.

ANTIMONY—Continues quiet at 9½ to 10c.

IRON PIPE—There is a fair enquiry for iron pipe at the advance. We quote: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1¼-inch, \$5.35; 1½-inch, \$6.90; 2-inch, \$9.35; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—Prices of scrap are very firm, and we hear of transactions at \$14 to \$15, as to quantity.

GLASS.

Demand for window glass is more active, both for prompt and future shipments. We quote: First break, \$1.35 in 50 foot boxes, and \$2.60 in 100 foot boxes.

PAINTS, OILS, ETC.

Business in this department continues to be active and satisfactory. Prices for the week remain without alteration. The demand for white lead continues very active, and it is estimated that grinders will have nothing to spare in their supplies for the season. The quotations for raw material maintain their firmness, and our quoted prices for paint are, therefore, all in favor of the buyer. Turpentine has been in active consumption for the varnish trade and price is firm at last week's quotation.

WHITE LEAD—\$5.37½ for Government standard; other grades in proportion.

RED LEAD—Pure, in casks, 4½c.; in kegs, 4¾c.; No. 1 in casks, 4¼c.

PUTTY—We quote: Bulk, \$1.50; bladder in barrels, \$1.65; tins in cases, \$1.90.

LINSEED OIL—We quote: Raw, 43c.; boiled, 46c.; 5-bbl. lots, 1c. less.

TURPENTINE—One to four barrels, 50c.

NAVAL STORES—We quote: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

CHEMICALS, ETC.

There is a fair trade in heavy chemicals. We quote: Bleaching powder, \$1.80 to \$2; bicarb. soda, \$2.25 to \$2.35; sal. soda, 67½ to 72½c.; carbolic acid, 1-lb. bottles, 25 to 30c.; caustic soda, 60 per cent., \$1.75 to \$2; do. 70 per cent., \$2 to \$2.20; chlorate of potash, 14 to 16c.; alum, \$1.40 to \$1.50; copperas, 60 to 75c.; sulphur flour, \$1.40 to \$1.60; do. roll, \$1.50 to \$1.75; sulphate of copper, \$4.37½ to \$4.62½; white sugar of lead, 7½ to 8¼c.; bich. potash, 10 to 12c.; sumac, Sicily, per ton, \$50 to \$60; soda ash, 48 and 58 per cent., \$1.25 to \$1.50; chip logwood, \$2 to \$2.50.

ASHES.

These continue steady with little doing at \$3.50 to \$3.60, and seconds, \$3.25.

HIDES.

Unchanged; lambskins, 50c. each, and beef hides, 6 to 8c., as to grade.

PETROLEUM.

Firm at the advance. We quote: Canadian, 14½c. in car lots and 15½c. in smaller quantities; American, 16½c. in car lots and 17½c. for small lots.

COAL.

Without change. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

ONTARIO MARKETS.

TORONTO, Oct. 22, 1897.

HARDWARE.

NO material changes are to be chronicled for the week. The volume of business is much as before, and that means that it is still fairly satisfactory. The confident tone which has been so much in evidence during the past month or two is still apparent, and there is an entire absence of the discontent which was so common only a short time ago. A new list has been issued by the manufacturers of harvest tools, and the discount has been changed on harvest tools. These are the only changes to note in regard to prices. In wire, the only kind that is meeting with any demand is hay-baling wire. One of the features of the trade is the firmness of wire nails, which are expected to shortly experience a further advance. Clothes wringers are in a little better demand than they were. Building paper is in active request.

BARB WIRE, ETC.—Dull. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE—The price of galvanized wire has been reduced, the discount now being 30 per cent. A few more orders have been received this week for ordinary fence wire, but the business being done is chiefly in hay-baling wire. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for

Horse Shoes, "M" Brand, 1897

—WE MAKE—

IRON SHOES

"Light" Pattern in Nos. 0 to 7

"Medium" Pattern in Nos. 1 to 7

"Snow Shoes" in Nos. 1 to 6

X. L. STEEL SHOES

made only by us under registered trade

"New Light" Pattern in Nos. 1 to 5

"Extra Light" Pattern in Nos. 0 to 4



TOE WEIGHT STEEL SHOES, all forward in Nos. 1 to 4.

MONTREAL ROLLING MILLS CO., Montreal

N.B.—To distinguish our Shoes, please note, (1) all our Shoes are stamped "M." (2) All our kegs are branded on side of keg "M Brand, 1897."

We are the sole manufacturers in Canada of "X.L." Steel and Toe Weight Steel Horse Shoes.

PERHAPS YOU ARE NOT AWARE that the most durable steel shingles are formed into shape **first** and then galvanized **afterwards**.

OUR —————

Galvanized Steel Shingles

are not cut out of large sheets of common galvanized iron, consequently there are no raw edges nor defects of any kind.

When you get OUR shingles you can depend upon their being coated **ALL OVER**, not in spots only.

The "Eastlake" and "Empire" Patent Shingles are **MADE ONLY** by us.

Beware of Imitations —————

Talk is cheap, but advertising costs money. Sensible people wouldn't advertise goods without merits. Unscrupulous people can imitate them at little cost. Do you want the real thing or the substitute? Insist on getting what you order.

Metallic Roofing Co., Limited

TORONTO

The Originators and Pioneers and most extensive makers of sheet metal building material in Canada.

galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—There has been quite a demand during the week for coppered steel and coppered spring. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—The feeling is decidedly firm, and the possibility of a further advance is being freely discussed. We quote: \$1.95 Toronto and Hamilton, and \$2 London. Carload lots 10c. per keg less. Prices at other points are based upon Montreal figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—Business is much about the same as last week. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is scarcely as good as it was. Discount, 50 per cent.

HORSESHOES—Business is being maintained. Discount \$3.25 f.o.b. Montreal.

SCREWS—Trade is being fairly well maintained. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS—Business is moderate. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—Trade is being fairly well maintained. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Is moving slowly. Plough line rope, cotton rope, sash cord have the call chiefly. We quote: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7½c.; ¾ in., 7¾c.; ¼ and 5-16

in., 8½c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Trade is improving nicely in a small way. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—A slight improvement is to be noted in the demand, although the orders are small. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS, ETC.—The improvement in the demand last week has been maintained, while for draining tools an increased demand is to be noted. Discount, 45 and 2½ per cent.

HARVEST TOOLS—A new list has been issued by the manufacturers for next season's goods.

BUILDING PAPER—Trade is quite active in this line. We quote as follows: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—No change. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—A fair business is reported in both enamel and tin ware, although the demand is chiefly for the former.

CUTLERY—Trade is being fairly well maintained.

SPORTING GOODS—The demand for the moment is principally for rifles, but the season's trade in guns and ammunition has been exceptionally good.

HINGES—Business is moderate. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CEMENT—The continued moderate weather has materially improved the market, the demand still remaining active. Prices are unchanged. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 per barrel.

METALS.

The metal trade continues on the whole in a satisfactory condition.

PIG IRON—The situation remains much about the same as a week ago. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Trade has slightly increased during the week. We quote base price at \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Some nice orders have been received during the week. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—Trade is brisk, especially in the No. 2 quality. In "dead flat" trade is about the same as a week ago. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24 \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Has also been going out well, orders being numerous. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Stocks are in pretty fair shape now, jobbers not now experiencing the same difficulty in supplying the demand. Trade continues satisfactory, both American and English iron being called for in large quantities. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb.

STANDARD of
AMERICA
for
30 Years

NICHOLSON



NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



SELLS
ON
SIGHT

A quick sharpener for Kitchen and Butcher Knives. Send for prices. It will make you money and please your customers.

THE PIKE MFG. CO.

Scythe Stones, Oil Stones, Razor Hones, etc.

Catalog free.

PIKE STATION, N. H.

The Marlin Model 1894 . . .

with its good and reliable SOLID TOP and SIDE EJECTION is made to take the 38-40 and 44-40 cartridges, but also the 25-20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

STEEL BOILER PLATES—Some good orders have been obtained. We quote: 3¾ and larger, \$1.75 per 100 lbs.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—Orders are all of a small nature. We quote as follows: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Trade in general has been fair, although no large sales are reported. We quote pig lead at 4 to 4½c., and bar, at 4½c.

SHOT—Trade is fair. We quote: Dropped shot, 6c.; chilled do., 6½c.; buckshot, 7c. Discount, 12½ per cent.

INGOT TIN—Is moving freely at firm prices. We quote 16¼ to 16½c. per lb.

INGOT COPPER—While quite a number of sales are reported, quantities wanted are small. We quote 12 to 12½c. per lb.

SHEATHING COPPER, ETC.—Trade has improved lately in sheathing copper, and braziers' and roofing copper have been moving more freely. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Stocks are low and prices have been advanced on wrought pipe. We quote: Wrought, ¼ to ¾ inch, \$1.87; ½ inch, \$2.35; ¾ inch, \$2.87; 1 inch, \$3.87; 1¼ inch, \$5.10; 1½ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, ½ inch, \$3.60; ¾ inch, \$4.40; 1 inch, \$6.15; 1¼ inch, \$8.37; 1½ inch, \$12.20 per 100 feet.

SOIL PIPE—There is still a fair trade being done. Discount, 60 and 10 per cent.

RANGE BOILERS—These are moving nicely, both in Canadian and United States make. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Trade is good and prices quoted are being adhered to. All-bright stock is again exhausted, but a fresh shipment is expected early next week. We quote: Half-polished, 52-sheet boxes,

\$2.25 to \$2.30; ditto, 60-sheet boxes, \$2.35; ditto, 75-sheet boxes, \$2.45; all-bright, \$2.90 per box.

TIN PLATES—There is no noticeable falling off in the demand. Orders are coming in freely both for coke and charcoal plates, and prices are being firmly maintained. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 or 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—While the orders are not large, they are coming in freely, and prices are unchanged. We quote: 1C, \$6 to \$6.25; 1X, \$7.50.

SHEET LEAD—The improvement noted last week has been maintained, and the price is unchanged at 5½c. per lb.

COIL CHAIN—There is a fair demand on lumbermen's account. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade shows some improvement, and prices are firm. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Not much doing. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—The improvement noted last week has been maintained. We quote:

Cookson's, 8¼ to 9c.; other makes, 8¼ to 8½c.

GLASS.

Orders for glass are coming in freely, although they do not cover a very large range of sizes. As noted elsewhere, prices are materially higher. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

The activity noted last week continues. Stocks of raw material are exceedingly light and quotations for all lead products at the different centres are firm and not easily shaded, even for choice quantity orders. Briefly, the situation unmistakably points to higher figures, and, from what we can learn, the hardware trade can look to a market of gathering strength and firmness with enhanced values. Ready mixed paints have received a mild spurt owing to the favorable weather. Putty has been going out freely. The price of this article is still much in the buyers' favor. Coach colors and vermilion reflect the general improvement in trade and the output is satisfactory. Gums have been keeping steady all the month, and there is a good enquiry for varnishes and japans. Gold leaf and painters' sun-

dries are without special feature.. Turpentine has been reduced one cent per gallon this week. Business is improving in all lines, and collections are much better.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 26c.

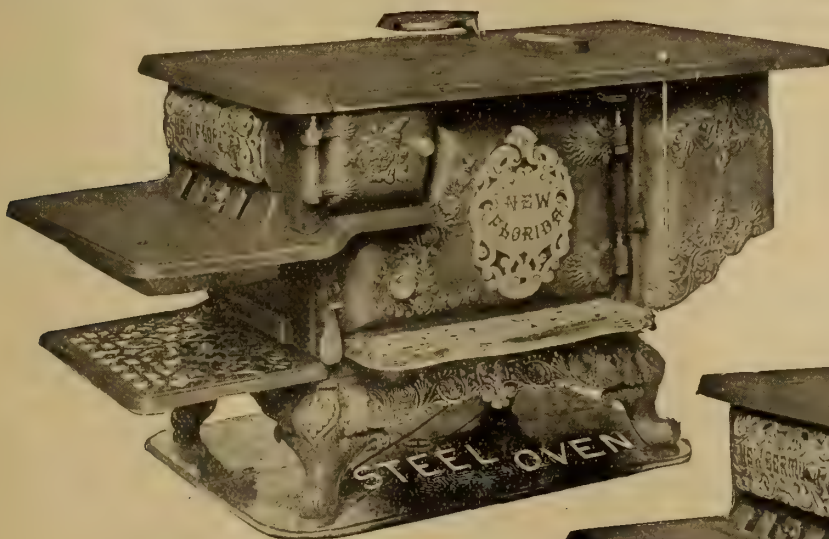
PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels



The attractive appearance of...

**Moore's NEW BERMUDA
NEW FLORIDA**

catch a customer's eye at once.

An examination of their many points of SUPERIORITY SELLS THEM.

Their durability, economy and perfect operation recommend to you another customer.

These are profitable goods to handle.

THE D. MOORE CO. LIMITED

Agents for Manitoba and Northwest Territories—Merrick, Anderson & Co., Winnipeg.

The Secret

All successful business men make their money by turning it over fast.

TO DO THIS you must buy only

**UP-TO-DATE
QUICK-SELLING GOODS**



HAMILTON

and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 51c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

Business is still fair. Prices are unchanged, with the exception of scrap rubber, which has advanced ¼c. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¼c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¼c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

COAL.

The supply of cars for the transportation of coal has been so limited that dealers have been unable to meet the demand, which is very active. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46, net tons.

HIDES, SKINS AND WOOL.

HIDES—Market is steady, the demand being fair, and stocks pretty well cleared up. We quote: Cowhides—Dealers pay 8½c. for No. 1, 7½c. for No. 2, and 6½c. for No. 3. Steerhides—60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—We quote: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 75 to 85c.

WOOL—Nothing doing in fleece wool: none on market. Pulled wools are fairly active. We quote super pulled wools at 21 to 22c.; extra at 22 to 23c.

SEEDS.

Alsike is somewhat dull and is quoted at from \$3 to \$4.50 per bushel, superior grades bringing higher figures. Red clover and timothy still move fairly well. We quote: Red clover, \$3 to \$3.25 per bushel.

Timothy, machine threshed, \$1 to \$1.25, and choice unhulled brings a slightly higher figure.

PETROLEUM. ETC.

Trade in all lines is good, especially in coal oil. Prices are unchanged. We quote in 1 to 10 bbl lots, imperial gallon, Toronto: Canadian, 14c.; carbon, safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

Scrap rubber has advanced ¼c. per lb.

Glass is from 10 to 30c. per box dearer.

The price on most sizes of wrought iron pipe has been advanced.

Manufacturers of harvest tools have issued a revised list.

The discount on galvanized wire has been reduced to 30 per cent.

Steel rails have advanced about \$1.50 per ton within the last month.

Trade in stoves, stove fittings, furnaces, coal hods, stove boards, elbows, etc., is brisk.

Owing to the scarcity of cars coal dealers are experiencing difficulty in supplying the demand.

A shipment of "Bugle" brand window glass has arrived for H. S. Howland, Sons & Co.

H. S. Howland, Sons & Co. are in receipt of another shipment of Elliot's butcher knives.

An active demand for "Cyclone" building paper is reported by M. & L. Samuel, Benjamin & Co.

Turpentine has been reduced one cent per gallon and is now quoted at 49c. Toronto, and 51c. outside.

Bertram, Wilson & Co., of Toronto, have had an exceptionally good demand for lumbering supplies during the past few weeks.

The McClary Manufacturing Co., Limited, report that the demand for their "Yukon" heater, recently illustrated in **HARDWARE AND METAL**, has exceeded their expectations.

UNITED STATES MARKETS.

NEW YORK, Oct. 20, 1897.

PIG TIN—The market was firm, but without quotable change. London cables came the same as on Monday, and dealings here were chiefly at prices on the basis of 13.90 to 13.95c. f.o.b. for five-ton lots. The steamer Mississippi brought about 290 tons, but this was well taken care of and had very little influence upon the market. Contracts are still neglected and quotations for the same may be considered purely nominal.

COPPER—Exporters' bids were in some instances reduced a fraction, and generally ruled considerably below sellers' ideas. The home trade demand was light also, leaving the market in a rather dull condition. Actual market value is somewhat uncertain owing to these conditions. About 11½ to 11¼c. for Lake Superior ingot, 11 to 11½c. for electrolytic and 10⅞ to 11c. for casting stock was quoted nominally.

PIG LEAD—There is still an unsettled condition of affairs in the market for this metal, with selling pressure somewhat severe and the demand from all quarters moderate. Common domestic could easily have been purchased at 3.95c. for spot and near future delivery. London cable quoted £13 10s. for soft Spanish.

SPELTER—Carload lot business of moderate proportions is about all that passes in this quarter, and the market is rather easy, with prices at about 4.20 to 4.25c. for prime western. London cable quoted £17 13s. 9d. for good merchant brands.

ANTIMONY—The market is steady, with fair jobbing business. We quote: 8 to 8½c. for Cookson's; 7¼ to 7¾c. for Hallett's, and 7 to 7½c. for Japanese.

TIN PLATE—No improvement is yet shown in the demand for American cokes, and the market is still in somewhat unsettled condition with prices weak. Foreign plates are unchanged and selling in small way only.

IRON AND STEEL—The entire market for crude materials is unchanged, business being only fair and prices generally steady. In finished products there is sufficient business to prevent serious weakness, but not enough to bring about any advance.

FOR SALE—A WELL-SELECTED STOCK OF Hardware, including Tinsmith Tools. Apply to Morton & Co., Fort William, Ont. (43)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.



PERSONAL MENTION.

Mr. Kerney, Toronto Tire Co., left yesterday for Winnipeg to look after next year's trade, the prospects of which he reports to be quite bright.

Mr. W. A. Drummond, who has been manager of Russill's hardware, stove and tinware business at the St. Lawrence Market, Toronto, has severed his connection with the firm.

Mr. Fred S. Wilkins, of Wilkins & Co., King street east, Toronto, attended the Woodbridge Fair this week, and reports the Fair a success. The Langton Manufacturing Co. showed a patent whiffletree, which is quite original and remarkably practical. The hardware manufacture exhibit was not as large as it might have been on account of the lack of space. Next year, however, the directors intend to have room for everything by enlarging the building.

DOMINION INTER-PROVINCIAL TRADE.

While it is undoubtedly true that every effort should be made to increase Canada's exports abroad, and the cry "The World for Canada" be well sustained, it is admitted that the trading of one province with another is of the utmost benefit and tends largely to the homogeneity and prosperity of the country at large. In this connection we note with pleasure some heavy shipments by the Canada Paint Co. of oxides, mortar colors and graphite from their own mines in the eastern provinces to the company's works in Montreal and in Toronto.

A CUTLERY CATALOGUE.

H. S. Howland, Sons & Co. expect to issue a cutlery catalogue about Nov. 1. It will be about 100 pages and handsomely gotten up. It will have about 2,500 illustrations. The cuts of the pocket cutlery will be full size on nearly every line. The firm claim it will be the most complete cutlery catalogue ever issued in Canada, and as the issue will be limited, dealers desiring a copy should make early application.

BRITAIN'S CYCLE TRADE.

United States Consul Barker, Birmingham, England, in his annual report to the State Department, says that the one marked development in that district during the year has been the cycle trade. It has been so great that there has been an overproduction. The trade with the United States has not been greatly affected, but no complete bicycles have been sent to the United States since 1894. The British foreign trade in bicycles amounted in 1895 to \$6,747,012; in 1896 to \$9,056,420, and in 1897 (estimated) \$7,877,275. So many men have been drawn into bicycle making that other branches have been injured. An increase of ten per cent. in the wages of skilled labor has resulted. In the past two fiscal years, the exports from the United States to the United Kingdom of cycles and parts of cycles was for 1896, \$613,592; for 1897, \$2,375,675.

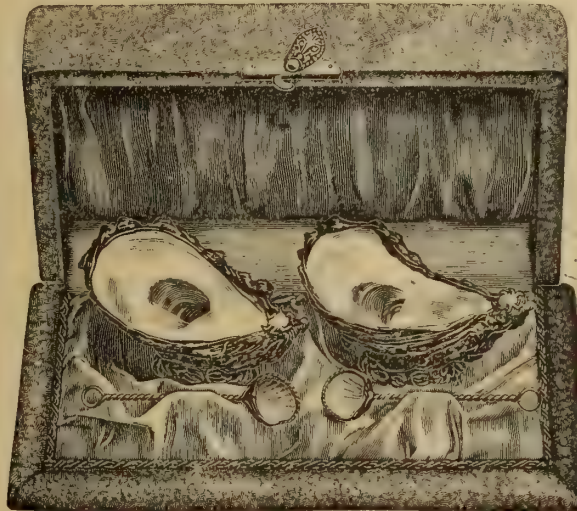
Baylis Manufacturing Co.

16 to 30 Nazareth Street, MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.**NATURAL OYSTER SHELLS**

Mounted in Electro Plate, Gilt Finish. Salt Spoons to match.

OUR line is so complete in NOVELTIES and SPECIALTIES and our prices so very reasonable that we do not think you can afford to pass us with your order for

Christmas Silver Ware

Confirm this by seeing what we have to offer, either through our traveler, by catalogue, or through your jobber.

THE TORONTO SILVER PLATE CO. Limited

E. G. GOODERHAM,
Manager and Sec.-Treas.

Factories and
Salesrooms

TORONTO, CANADA

Hardware Stock for Sale

A first-class Hardware Stock, including Bar Iron, Paints and Oils, with business in full swing, for sale at a rate on the \$ on invoice prices. For particulars apply to DINGWALL & ROSS, Port Hope, or to ROBERTSON & MacLENNAN, Barristers, Canada Life Building, Toronto.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

PILON FRERES, (Narcissus Pilon, deceased) general merchant, Alexandria and South Casselman, Ont., are offering to compromise at 50c. on the dollar.

Israel Masse, general merchant, MacNider, Que., has assigned.

C. Fackney, contractor, Quebec, is offering to compromise.

Hugh McDonald, general merchant, Mahon, N.S., has assigned.

Ernest Cloutier, general merchant, Notre Dame Du Lac, Que., has assigned.

Thomas Barrie, general merchant, Pembroke, Ont., has assigned to J. J. O'Meara.

John E. Black, general merchant, Springfield, Ont., has assigned to C. B. Armstrong, London, Ont.

Henri Garon, general merchant, Causapascal, Que., is offering to compromise at 60c. on the dollar.

W. A. Bennett, dealer in agricultural implements, Spencerville, Ont., has assigned to T. K. Allan.

Pierre Dorias, general merchant, South Indian, Ont., is offering to compromise at 20c. on the dollar.

A meeting of the creditors of Gonzague Gagnon, general merchant, Thurso, Que., was held on the 14th inst.

A meeting of the creditors of Michael Hayes, general merchant, Sheenboro, Que., will be held on the 27th inst.

James Vigés, tinsmith, Stevensville, Ont., has assigned to John Hanson, Stevensville, and a meeting of his creditors will be held on the 23rd inst.

W. H. Thomson, general merchant, Schreiber, Ont., has assigned to J. M. Austin, Chapleau, Ont., and meeting of creditors was held on the 21st inst.

The Toronto Junction Foundry Co., Limited, have called a special meeting of shareholders for 27th inst. to consider advisability of winding up or assigning.

PARTNERSHIPS FORMED AND DISSOLVED.

Pelletier & Cyr, general merchants, Windledge, N.B., have dissolved partnership.

Ross & Elmsie, bicycle repairers, Owen Sound, Ont., have been succeeded by Ross & Bradley.

Campbell & Wilson, tinsmiths, Chatham, Ont., are about to dissolve. J. N. Campbell will continue.

Craig & Taylor, Freetown, P.E.I., have dissolved partnership as general merchants. Bert Craig will continue.

Everson & Hawkins, hardware merchants, Oshawa, Ont., have dissolved partnership. J. E. Hawkins to continue.

The firm Kidd & Co., general merchants, Athlone, Ont., have dissolved. C. J. Kidd retiring, and a new firm has been formed

by Bridget, Joseph and William Kidd; style unchanged.

Wilson & Dixon, stove dealers, Vancouver, B.C., have dissolved partnership. Mr. Dixon to continue at Vancouver.

R. Allan Crowe and G. W. Crowe have registered as co-partners of the firm Crowe Bros., tinsmiths, Bridgetown, N.S.

E. Wincelas Caron and Emile Pare have registered as proprietors of the firm Caron & Pare, tinsmiths, Windsor Mills, Que.

Henri Lefebvre and Raoul Roberge have registered as proprietors of the firm Lefebvre & Roberge, saw millers, Valcartier, Que.

SALES MADE AND PENDING.

E. H. Suffel, general merchant, Vienna, Ont., has sold out to J. Pedlow.

The stock of Laing & Meharry (estate of), hardware merchants, Port Perry, Ont., has been sold.

Wm. Huffner (estate of) hardware merchant, Boissevain, N.W.T., has sold out to Harry Price.

St. Barthlemi L. Morand, general merchant, Farnham, Que., has sold out to Jacques Morand.

The assets of C. W. Henderson, electrical supplies, Montreal, are to be sold by auction on the 28th inst.

Cote, Boivin & Co., general merchants, Chicoutimi, Que., have purchased the bankrupt stock of Alf. Duchene, Roberval, Que., at 65c. on the dollar.

The assets of A. J. Allaire, general merchant, St. Guillaume D'Upton, Que., were sold at auction on the 21st inst.

CHANGES.

F. Walters has opened out a paint, etc., business in Winnipeg, Man.

Thomas Mair, tinsmith, Desboro', Ont., has been succeeded by Jacob Forler.

J. L. E. Bisailon & Co., carriage makers, etc., St. Johns, Que., have commenced business.

George Marsh, general merchant, Beulah, Man., is opening a branch store at Elkhorn, Man.

James Monteith, general merchant, Waverley, Ont., has been succeeded by F. H. Dale.

Wm. Gow, blacksmith, South March, Ont., has added a general store to his business.

Alphonse Nadeau has commenced business as a general merchant at Lake Etchemin, Que.

L. J. Godreau, general merchant, Abbotsford, Que., has registered as proprietor of the Monarch Blotting Co.

The Milner-Walker Wagon Works Co. of Walkerville, Ont., Limited, have obtained charter of incorporation.

C. J. Robertson, printers' machinery and supplies, Montreal, has removed from 12 Phillips square to 588 Craig street.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

H. Boker & Co.'s

FAMOUS

CUTLERY

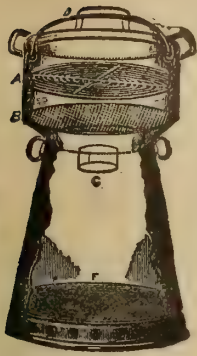


In large varieties

**PEN KNIVES
SCISSORS
RAZORS**

**RICE LEWIS & SON
TORONTO**

THE "KRASEL"



Double Ash Sifter

P. R. KRASEL

Patentee and Manufacturer

2529 St. Catherine St.

MONTREAL

Write for prices and samples

Ideal Jewel

Self-feeding BASE-BURNER

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet STEEL and measures

11 inches high

11 inches wide

17 inches deep

2 SIZES WITH OVEN

2 SIZES WITHOUT OVEN

Manufactured by

Burrow, Stewart & Milne
HAMILTON

Agents for Manitoba and Western Territories, Merrick, Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and P. E. Island, W. L. Haldimand & Son, Montreal.

FIRES.

The planing mill of Francis Smeath, Goderich, Ont., has been burned.

Nearly all the business men of Windsor, N.S., were burned out on the 17th inst.

H. R. Scratch, stove dealer and tin-smith, Kingsville, Ont., has been burned out.

R. E. Waldon, blacksmith, Bagot, Man., has been burned out; loss, \$2,500; insurance, \$500.

Wm. Ball, planing mill owner, Papineauville, Que., has been burned out; no insurance.

L. C. Lowrie, general merchant, Bagot, Man., has been burned out. Loss, \$4,500; insurance, \$1,000.

J. F. McManus (estate of), general merchant and lumber miller, Bathurst, N.B., has suffered loss by fire; no insurance.

A. Miller & Co., general merchants and saw mill owners, Sherbrooke, N.S., has suffered loss through fire, his lumber having been burned.

DEATHS.

Joseph Comeau, saw mill owner, Maniwaki, Que., is dead.

John Collins, general merchant, Little River, N.S., is dead.

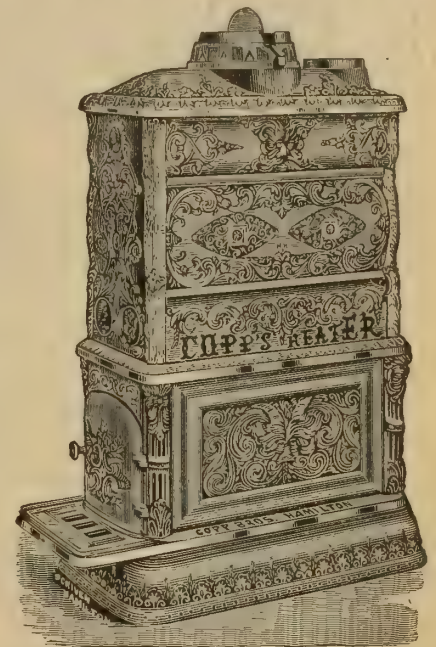
Alex. Acheson, general merchant, Rosenfeld, N.W.T., is dead.

Wm. P. Grace, of the firm of Grace Bros., general merchants in Bouchette and Maniwaki, Que., is dead.

BICYCLE PRICES ABROAD.

The Austrian Consul-General at London reports to his Government that since the American manufacturers of high-class bicycles reduced their prices American competition has been severely felt by English makers, and that a general price reduction is inevitable. The Rudge-Whitworth Co. has already decided to reduce prices 30 to 50 per cent., selling its 22-guinea wheel at 16 guineas and its 18-guinea wheel at 12 guineas. Other manufacturers are reported as trying to resist a reduction; but, as the Consul-General thinks, they will be compelled to yield at no distant day, since the demand for bicycles is at present rather slack in the English market, and the American wheels, by reason of their elegant construction and low prices, have become very popular there. In the first half of 1897 England imported bicycles to the value of £381,000, most of these being of American manufacture and a small number of German origin. On the other hand, England's export of bicycles is declining, the exports for the first six months of the year amounting to £875,000 against £916,000 in the corresponding months of 1896. The exports in June were only £116,000, against £154,000 in June, 1896.

COPP'S
WARRIOR HEATER

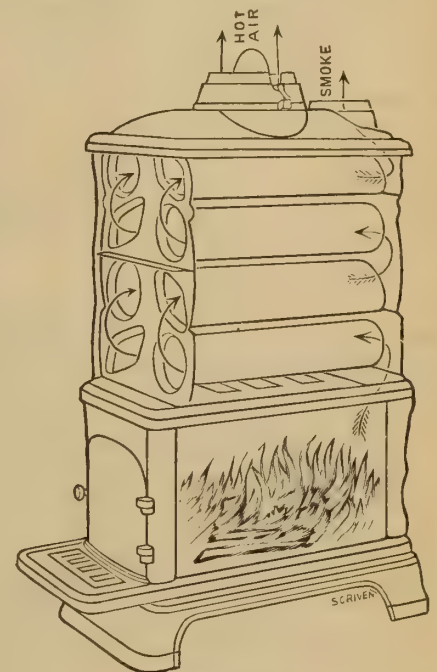


Our Copp Heater is a marvelous success, and has no equal.

It will render a larger increase of trade, as well as greater profit to the dealer, than any other stove made.

Its capacity is from 15 to 20 thousand cubic feet, and obtained with small consumption of fuel.

We shall be pleased to give further information upon enquiry.



Sectional Cut.

This cut shows the manner of conducting the combustion from fire-box to exit, after travelling over 14 feet. Direct draft dampers are provided.

The cold air passing in under the centre ring is forced in contact with the peculiarly shaped steel tubes, thereby becoming intensely heated.

One size burning 34 inch wood.

MANUFACTURED BY

THE COPP BROS. CO.

...Limited.

HAMILTON, ONT.



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern **STOVE POLISH**

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

MANITOBA MARKETS.

WINNIPEG, Oct. 18, 1897.

THE condition of trade here during the past week may be said to show a tendency to decrease in volume. This may fairly be attributed to two causes: The fine weather has broken and it is unfavorable for building, and the rain having come and plowing now being possible, farmers are devoting all their energies to getting their land ready for next year's crop. This city draws all its trade practically from the farming community, and activity or depression in the wholesale trade is governed to a very large extent by the humors or necessities of the agricultural class. Collections, while fairly good, are hardly up to expectations, much of the grain being held in store for higher prices. Every elevator in the country is well filled and most of them are full to the roof. On the whole, the hardware trade is in a healthy condition. At least, outward appearances would so indicate. About a year and a half ago, J. H. Ashdown erected one the largest hardware warehouses in the Dominion, and now G. D. Wood & Co. are following suit with one nearly as extensive. History apparently is repeating itself, and as it has been in the United States, doubtless it will be in Canada, that the largest jobbing houses will be located in the west. Local dealers are becoming more aggressive every year, and gradually outside competitors are forced to quit the field in favor of these comparatively youthful institutions with their more modern ideas.

In respect to prices, very few changes are to be noted. Still, in sympathy with advances made on many articles at the point of production, dealers are adhering firmly to prices, and in all probability many lines of staples will show an advance in the not distant future. The following represent the present quotations on leading articles:

BARB WIRE—\$2.60 per 100 lbs.; plain twist wire and staples, \$2.75 per 100 lbs. (practically out of market, as demand is so small at this season).

CUT NAILS—\$2.20 basis; wire ditto, \$2.65. Horseshoe nails, 45 per cent. discount.

SCREWS—Flat head bright, 85 per cent.; round head bright, 77 1/2 per cent.; flat head brass, 80 per cent.; round head brass, 72 1/2 per cent.

ROPE—Sisal, \$6.75 per 100 base; manilla, \$8.25.

HARVEST TOOLS—60 per cent. discount.

SPADES AND SHOVELS—40 per cent. discount.

BUILDING PAPER—Demand up to the present has been brisk. Cyclone and Anchor, plain, 55c. per roll; Cyclone and Anchor, tarred, 70c. per roll.

BAR IRON—\$2.10 per 100 lbs. base.

GALVANIZED SHEET IRON—24 gauge, \$4 per 100 lbs.; 26 gauge, \$4.25 per 100 lbs.; 28 gauge, \$4.50 per 100 lbs.

TIN PLATES—I.C. charcoal, \$4.50 per box; I.X. charcoal, \$5.50.

CANADA PLATES—\$3.25 per box. Sheet zinc in casks, \$6 per 100 lbs.; broken lots, \$6.50.

PORTLAND CEMENT—Canadian, \$3.75 per bbl.; English, \$4 ditto; Jossen, \$4.25 ditto.

WHITE LEAD—Pure, \$6.25 100 lbs.

LINSEED OIL—In barrel lots, raw, 55c. per gallon; boiled, 50c.

DIFFERENCE IN BOUNCING METHODS.

Englishmen may be characterized as a little slow sometimes, but they generally "get there" as well as their transatlantic brethren. Suppose you were to travel on an American train without the necessary ticket. What would happen? The gentlemanly conductor would most likely stop the train, and with the assistance of the muscular brakeman, forcibly eject you, leaving you to ruminate in some desolate cow pasture 'steen miles from anywhere on the Biblical text anent the way of transgressors. Now, Englishmen love system, and the stopping of a train midway between stations for "bouncing" purposes jars on their sense of the eternal fitness of things. We

read in The Cardiff Western Mail of July 13 that a lawyer of Neath, Wales, having participated freely in the flowing bowl, attempted to ride from Swansea to Neath without the necessary piece of pasteboard. He put on a bold front and dared railway officialism to do its worst. Did Mr. Conductor stop the train so he could get off and walk? Not a bit of it. That official quietly withdrew, and as the train gamboled merrily past Welsh stations with unpronounceable names, the non-payer of fare was, to all intents and purposes, as well off as his neighbor. Alas for him, however, there was a sequel. On arriving at Neath the recalcitrant passenger was taken in tow by the police, and was fined 40 shillings for traveling without a ticket, besides listening to a severe and lengthy lecture from the bench on the unutterable meanness and moral obliquity shown by a man who would try to defraud a railway company out of 8 pence.

TRADE CHAT.

The McClary Manufacturing Co., of London, Ont., manufacturers of stoves, tinware, enamelled goods, etc., is about to establish a factory in Montreal, and is looking for a site upon which to build. The company have a handsome five-storey show room on St. Peter street, Montreal, but the purpose of the factory will in no way interfere with that, nor yet with the number of men employed here. The idea is to manufacture cheaper grades down there, instead of having to ship the raw material here for manufacture and then ship it back again.

A Sheffield firm have patented a clever arrangement which combines in one article a knife and a fork. In shape and size it resembles a moderately large pocket knife, and as it is got up with aluminum scales it would hardly strike a casual observer that it contained a useful knife and fork nearly approaching dessert size. By opening the fork half way, and sliding it downwards, the knife and fork are separated, and can be used in the ordinary manner, in the right and left hand. The movement is simple and effective, and the putting together of the two parts into one implement is equally easy.

COST OF STOPPING A TROLLEY CAR.

THERE is an old adage to the effect that what is worth doing at all is worth doing well. Because we cannot see the force that propels the trolley car we are apt to forget that the humble duties of the motorman require intelligence. It looks as if he just turned a handle and that was the end of it, but the real truth of the matter is something very different. It takes as much electric power to start a car as animal power, and it requires less current to keep the car moving than to start it, so that a great number of starts and stops means a large consumption of energy. In The American Electrician there appears an article in which the actual figures for these two cases are given. It is shown that the cost of one stop on each trip of a car during a year on a fifteen-car line may amount to \$70, or to \$467 for a 100-car road; so that if these figures are multiplied by two stops at each crossing on a road operating long lines the large cost is evident. Careful handling of the controller will save over \$1,000 a year on a fifteen-car road and \$7,000 a year on a 100-car road. The difference between a careful motorman, who has been well instructed, and a careless one, may amount to from 3 to 8 per cent. of the total energy consumed. It is perfectly safe, according to this authority, to say that 10 per cent. of the energy can be saved by more careful handling of the controller, while on most roads at least 15 per cent. could be saved without doubt. The maxim of every motorman should be: "Use the brake as little as possible and drift as much as possible." The employment of skilled motormen capable of understanding the mechanism they handle would result in a saving to the trolley companies, even though a higher salary were paid the men, and at the same time add much comfort to the passengers.

ACIDS FOR DISSOLVING IRON.

A correspondent of The Metal Worker writes that journal as follows: "I notice in The Metal Worker of September 11 an inquiry from 'Subscriber,' Reading, Pa., asking for an acid to dissolve iron. I had occasion to reduce some iron wire to a diameter of 15-100 inch, and used the following mixture to accomplish it: Gallic acid (crystals), 10 grains; nitric acid c.p., 1 ounce. Prepare by shaking into a uniform mixture. Paint or rub the mixture on the iron or steel evenly; allow it to partly dry. Wipe the metal and apply until the desired thinness is obtained. The gallic acid may be increased a little if desired. It would be well to wear gloves during the operation, as gallic acid and nitric acid make an almost indelible stain on the skin. The above worked very well with me."

Seen that Flat Bridled Brush yet?

Seeing is believing—seeing it, you will buy it—buying it, you will sell it easily to all economical Painters, and make a good profit besides.

Boeckh's Patent Bridle prevents that "bulging" in the centre and the paint can't possibly work through. Send for our Free Book about the Brushes we make.

Chas. Boeckh & Sons, Mfrs.

Toronto, Ont.

SEND US YOUR ORDERS FOR

Window Glass Plate Glass Leaded Glass

AND GLASS OF EVERY KIND

Toronto Plate Glass Importing Co.

HILL & RUTHERFORD

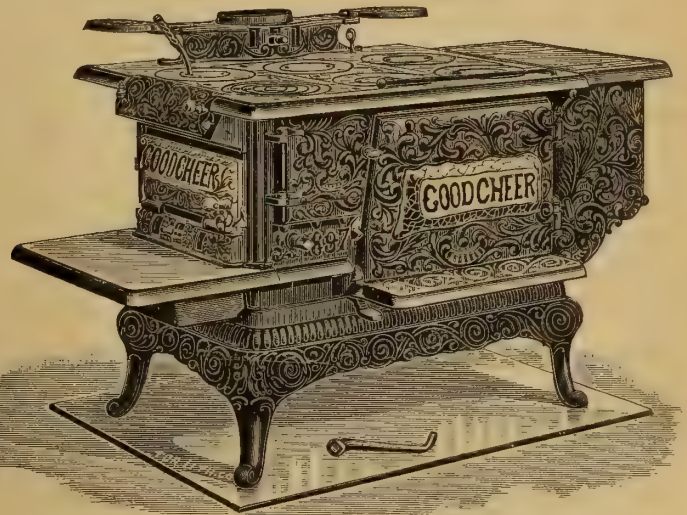
135 and 137
Victoria St.

TORONTO

Good Cheer Ranges

LARGE
STEEL
OVENS

Three styles each—Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT

Plumber and Steam-Fitter

PLUMBING CONTRACTS.

THE Keith & Fitzsimons Co., Limited, Toronto, have contracts for the gas and electrical fittings for the new building of the North American Life Insurance Co. King street, the Conservatory of Music, College street, and three residences on St. George street, Toronto; steam-heating for the examining warehouse, Custom House, Front street, Toronto; for the steam-heating extensions for the Kemp Manufacturing Co., Gerrard street, Toronto, and for plumbing and hot water heating for Dr. Cotton's residence, Simcoe street, Toronto, and Mr. Horn's residence, Utica, Ont.

Beavis & Cook, Toronto, have the plumbing contract for a residence on Ontario street, Toronto.

Guest & Co., Toronto, have gas-fitting and plumbing contract for the Harris Hotel, Little York, Ont.

Fiddes & Hogarth, Toronto, have contracts for the heating of a residence on Parliament street, and for plumbing of a residence on Glen road, Toronto.

T. O'Connell, of Montreal, has secured the contract for the plumbing of six houses for Mr. Clark, and the plumbing, heating and ventilating of four houses for Mr. Killoran.

Carroll Bros., of Montreal, have the contract for plumbing, heating and ventilating the American Steam Laundry building; also the contract for overhauling one block of houses for M. F. Schudan, plumbing, heating and ventilating.

A. MacKay & Co., of Montreal, have secured the contract for the plumbing, heating and ventilating seven houses for Robert Nevell, Montreal Annex, and another for plumbing, heating and ventilating two houses for Wm. MacDonald; also the contract for three No. 8 Oxford furnaces for the Nordheimer building.

GAS AND ELECTRIC LIGHT CONTRACT.

At a meeting of the Toronto Board of Control on Friday, last week, the following tenders were submitted for the gas and electric lighting of the new City Hall: No. 1 (a) \$28,706, (b) \$25,825; No. 2 (a)

\$36,635, (b) \$31,510; No. 3 (a) \$39,963, (b) \$29,987; No. 4, \$38,492.

Mr. Lennox, the architect of the building, recommended that the tender be given to No. 1 (a), which the Board of Control eventually did, the Bennett & Wright Co., Limited, of Toronto, being the successful tenderers.

HOW A PLUMBER DOES A JOB.

A gentleman drove up one day before a plumbing shop,

And told the master plumber that he had not long to stop.

"I have a building ready for the plumbers to begin,
"But I must have it quickly, as cold weather's setting in.

"Put in two Primo closets, nickel pipes down to the floor,

"A Standard roll rim bath-tub, the best that's in the store;

"Put in Ceramic wash trays, with nickel cocks and plugs,

"And underneath the bath tub put two nice bathroom rugs.

"Put in a copper boiler and a heavy roll rim sink,
"And don't forget a filter on the water that we drink.

"Put a grease trap in the kitchen and a safe down on the floor,

"And in the butler's pantry put cocks with ground in core."

The plumber took the order, said he'd do it right away;

Got the stock and tools together for the boys to start next day;

Went round and took the measurements and from them drew a plan,

And figured out the places he was going to work each man.

And early in the morning when the men came in to know

On what job they were going, they were told to wait for Joe:

He'd return in just a moment, there's a lightning job to do;

He expected every journeyman to rush and get it through.

So Adam, Fred and Sammy, with Dan and Will, and Dick,

Were sent to do the plumbing, and they had to do it quick.

They started at the roughing, by noon they had it done;

When Joe came 'round at one o'clock the finish had begun.

So Joe put on his overalls and gave the boys a hand;

He dressed out all the lead waste, and Freddie poured the sand;

And Sammy shaved and soiled the pipe, and Adam wiped the joints,

So every fellow understood he had to make his points.

The baths and closets soon were set, the waste and Croton run;

The butler's pantry was the next, by 3 o'clock 'twas done.

The wash trays in the laundry took the gang about an hour,

And twenty minutes later they connected up the shower.

They started in the kitchen at the boiler trap and sink,

The measurements just fitted—they had hardly time to think.

They looked about the building, there was nothing else to do,

They had everything completed, and by 5 o'clock were through.

Next morning when the gentleman went 'round to see his place,

He found the plumbing finished—he had such a pleasant face—

He examined all the fixtures but he could not find a flaw;

'Twas the finest job of plumbing he declared he ever saw.

He told his wife and daughter, his mother and his son,

They could move into the building, all the plumbing work was done.

The fixtures are just splendid, and the work is "out of sight!"

When a plumber does your plumbing it will be exactly right.

The man felt so elated that he came down to the store

And asked to see the plumber, and settled up his score.

He praised the work and fixtures, he was satisfied 'twas plain;

When he left he said "Good evening, you will hear from me again."

Next evening, just at nightfall, a coach and four in hand

Came driving down the main street and headed by a band.

They halted at the plumbing shop and played a lively air,

And Joe and Adam, Will and Fred, and Sam and Dan were there.

The gentleman alighted, called the boys out on the walk,

While the band played "Rosie O'Grady" and "The Sidewalks of New York."

The boys were all invited to a feast at Daly's Inn;

When everyone was seated the festivities did begin.

They ate and drank, they talked and sang till near the break of day,

And having such a jolly time they could not get away;

But business prompted action, they could not longer roam,

And everyone departed, and the band played "Home, Sweet Home."

—Plumbers' Trade Journal.

The Ontario Lantern Company

HAMILTON, ONT.

MANUFACTURERS OF

**Royal Cold Blast Lanterns
Climax Lift, Crank and
Tilt Lanterns
Banner Lamp Burners
Tubular Lantern Burners**

Special Stamped Sheet Metal Goods
made to order.

WALTER CROSE Sole Selling Agent **MONTREAL**

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

ARMSTRONG MAN'F'G. CO.

AWARDED TO
Farmington
BRIDGEPORT CONN.
For the best
Standard Size
FOR PIPE AND BOLTS
CLAIMS
SIMPLICITY DURABILITY
CLEANLINESS EASILY
PUT IN
REPAIR

WATER GAS
AND
BRIDGEPORT, CONN.

CATALOGUES ON APPLICATION.

STEAM FITTERS
TOOLS

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

Hardware, Plumbers' and Bicycle Specialties.

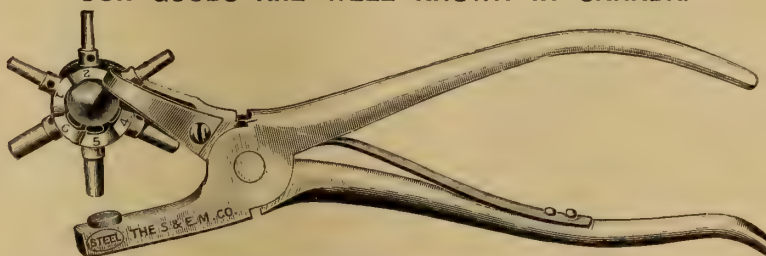
OUR GOODS ARE WELL KNOWN IN CANADA.

NO 3

1897

CATALOGUE

Send for it.



NEW REVOLVING PUNCH.

Mention this paper,
Canadian HARDWARE
AND METAL.

THE SMITH & EGGE MFG. Co., Bridgeport, Conn., U. S. A.

BEST METAL FOR CYLINDERS AND VALVES.

At the recent convention of the American Railway Master Mechanics' Association, one of the members gave a mixture used by the Norfolk and Western road in making metal for cylinders, valves and valve seats. The mixture consists of 20 per cent. steel castings, old steel springs, etc., 20 per cent. No. 2 coke iron, and 60 per cent. scrap. From this can be got a good solid metal, and in cylinder casting there seems to be less trouble from honeycombing, and the metal finishes more nicely than the ordinary cast iron mixture. The mixture shows very regular results, and is about 24 per cent. stronger than the ordinary cast iron mixture. Its constituents are :

Silicon.....	1.51
Manganese.....	0.33
Phosphorus.....	0.65
Sulphur.....	0.068
Combined carbon.....	0.62
Graphite.....	2.45

IRON FOR WATER CLOSETS.

Regarding the use of iron, either galvanized or enameled, for water-closet purposes there is hardly any necessity for dwelling on its unfitness. Earthenware is the only fit material, and nothing else should be used. Iron is used because it is cheaper, and that is a mighty poor and slim reason for using it, especially at the present time when earthenware closets can be had for very nearly the same cost. So in summing up this question of latrines they have no reason for continuing to exist. First-class in-

dividual water-closets, automatic in action and very reliable, can be got for a very low price. These closets have every merit that latrines lack and they should be generally used, because they meet the requirements fully and thoroughly.

BATHROOMS IN PUBLIC SCHOOLS.

Boston, Mass., is to have a new public school named after Paul Revere, which will cost, including the site, about \$350,000. The building will be in light pink granite, gray, red and white brick and terra cotta, and will contain public bathing facilities for the children.

The northeast corner of the basement is set aside for the girls' bathroom, containing dressing closets and ten bathing compart-

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

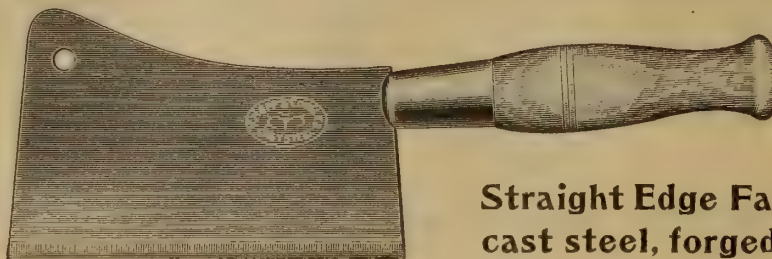
U. S. A.

SEND FOR

Catalogue..

of our Fall
line of

HARDWARE SPECIALTIES



NO. 2 CLEAVER.

Straight Edge Family Cleaver. Best cast steel, forged ; with heavy steel ferrules. Perfectly balanced.

ments, while the northwestern corner is to be fitted up with toilet, dressing and bath-rooms for the boys. Each bathing compartment on the girls' side contains a Gegenstrom shower bath, with a seat and a foot bath. The boys' bathroom is separated by curtains from the general dressing room, and contains eleven Gegenstrom showers.

PLUMBING NOTES.

Grant & Wright, plumbers, Halifax, have dissolved partnership.

J. E. Cotterell, plumber, etc., King street west, Toronto, has removed to 489 Church street, Toronto.

The Baptist church at Pereau, Kings, Nova Scotia, intend taking immediate steps toward building a new church.

Permits have been granted to Edward Jury, London, Ont., for the erection of a brick veneer wagon shop to cost \$250, and to N. Tackaberry, of the same city, for the erection of two brick residences to cost \$1,800 each.

A HINT FOR STOREKEEPERS.

A lesson which many a small storekeeper may learn to his advantage is that within the limits of his resources the same system and methods which prevail in the large store should be used by him. His window may be small and old-fashioned, but it should be as carefully trimmed as though it were of plate glass and larger than the front of his store. His stock may be limited and cheap, but for these very reasons unusual effort to arrange it tastefully should be made. He doesn't have a thousand dollars a day for advertising, nor a specialist to write his ads.; therefore, he should be all the more careful to make what little he does spend for publicity go just as far and be just as effective as possible. The very reasons which are oftenest urged by small dealers in excuse for their lack of intelligent and progressive methods are those which most convincingly prove the necessity of such methods.—Trade Magazine.

HOW WORRY AFFECTS THE BRAIN.

MODERN science has brought to light nothing more curiously interesting than the fact that worry will kill. More remarkable still, it has been able to determine, from recent discoveries, just how worry does kill.

It is believed by many scientists who have followed most carefully the growth of the science of brain diseases, that scores of the deaths set down to other causes are due to worry, and that alone. The theory is a simple one—so simple that anyone can readily understand it. Briefly put, it amounts to this: Worry injures beyond repair certain cells of the brain; and the brain being the nutritive centre of the body, the other organs become gradually injured, and when some disease of these organs, or a combination of them, arises, death finally ensues.

Thus does worry kill. Insidiously, like many another disease, it creeps upon the brain in the form of a single, constant, never-lost idea; and, as the dropping of water over a period of years will wear a groove in a stone, so does worry gradually, imperceptibly, but no less surely, destroy the brain cells that lead all the rest—that are, so to speak, the commanding officers of mental power, health and motion.

Worry, to make the theory still stronger, is an irritant at certain points, which produces little harm if it comes at intervals or irregularly. Occasional worrying of the system the brain can cope with, but the iteration and reiteration of one idea of a disquieting sort the cells of the brain are not proof against. It is as if the skull were laid bare and the surface of the brain struck lightly with a hammer every few seconds, with mechanical precision, with never a sign of a let-up or the failure of a stroke.

Just in this way does the annoying idea, the maddening thought, that will not be done away with, strike or fall upon certain nerve

cells, never ceasing, and week by week diminishing the vitality of these delicate organisms that are so minute that they can only be seen under the microscope.—Pharmaceutical Products.

A NOVEL DEPARTURE.

A credit bureau of a somewhat novel character has been established in Chicago, according to one of the papers there. It has been started "for the benefit of people of small means who desire to open an account at the department stores, where they can find everything of use in housekeeping or for clothing themselves. Of course, this bureau is not open to people who cannot give ample security in the way of names or reference, and even have the indorsement of some person of known credit, but, their credit once established, they can go to any store and buy anything they fancy, and have it all kept in one combination account at the bureau. Many people might perhaps have an account with one store, if it was a small one, but to be able to buy at any store on credit gives them the benefit of all the bargain sales, which is an object to everybody." The bureau obtains its patrons by advertising for them in the following fashion:

WANTED—Names of responsible people who would like to open an account in the department stores.

WANTED—Clients who are working on a salary and would like to buy on credit or borrow any sum of money on short time.

WANTED—Honest people to buy goods on weekly instalments.

HARDWARE CLERKS' OFFICERS.

At the annual meeting of the wholesale hardware clerks, Montreal, the following gentlemen were elected officers: O. Faucher, hon. president; F. Bacon, first hon. vice-president; P. Gravel, second vice-president; L. Gravel, president; Octave Genereux, first vice-president; L. J. A. Drouin, second vice-president; W. A. Dansereau, treasurer; E. P. Moineau, secretary; E. Charbonneau, corresponding secretary; committee, L. W. A. Paquet, A. J. Yon, L. McMahon, V. Laporte, H. Mailloux, F. Cantillon, J. Lemieux.

Good Advertising

For Wide Awake Retailers

By F. James Gibson.

Our "Good Advertising" department is to help our subscribers to do better advertising. The gentleman whom we have selected as its conductor is well known as one of the foremost advertising specialists of the day. Any of our readers who desire the benefit of Mr. Gibson's criticisms on advertisements or advertising methods, or his advice on any advertising subject, can have it or both entirely free of charge by writing to him in care of this journal.

If correspondents so desire, fictitious names or initials may be used for publication. But all requests should be accompanied by the subscriber's name.

From The Dry Goods Review.



THE first essential of good advertising is truthfulness. The man who lies in his advertising not only commits a moral wrong, but he makes a mistake that will ruin him if he keeps at it long enough and hard enough.

I know of a very large store in New York which is owned and conducted by a man whose morals are deplorable, according to common report.

This man is smart enough to know that to be successful he must conduct his business, which is a retail one, on the lines of the highest rectitude. One of the things he is most particular about is his advertising. No statement ever goes into an ad. of his that is not absolutely true. If he says that a certain line of silks has been marked down from \$2 a yard to \$1, the public can depend on the statement absolutely. The result is that every advertisement of the firm is believed. It is easy to see what a great "pull" a reputation like this gives a business house.

When you once fool a man or a woman (especially a woman, and women are the great retail buyers of goods,) it is difficult to command belief in future advertisements. The advertiser who is in the habit of fooling the community soon finds himself distrusted. And it doesn't need a prophet to foretell that success will never

ride on a tandem bicycle with him unless, perhaps, he gets into the green goods business or something similar.

There was a time not long since when most advertisements were generally received with incredulity. "Oh, it's only an advertisement!"

was then a common expression, and to some extent

Clarke's Corned Beef in 2 lb. tins, 25c. a tin.	Mens Caps, something choice at 25 and 35c.
Morton's fresh herring, the finest made.	Notably four in hand ties at 2 for 25c.
Golden Finnan Haddie in flat tins, 2 tins for 25c.	Gents Kid Gloves unlined in tans, 50, 75c. 1.00 pr.
York, free from bone and not too fat—speci- ally.	Gents cotton drawers and shirts from 25c. each up.

YOU SHOULD

Try Colman's Dairy Salt for Butter.

" Dwight's Cow Brand Baking Soda.

" A pound of Ludella Black Tea.

Cottonade Pants—A fresh arrival this week in good dark dressy patterns; also blue with bib attached.	Castile Soap—the genuine French manufacture, in 5c. cakes only.
Deep skin Binding Mitts with patent fastening at wrist.	Oatmeal soap—Morse's best.
	Madame Ruy's Complexion soap. A popular line for everyday toilet—only 5c. bar.

J. M. Steel - Clarksburg.

Fig. 1.

this distrust in advertising still exists. But it is gradually passing away under the influence of the truthful advertising, which advertisers are by degrees finding out to be the only kind that pays in the end.

I am asked to criticise the ad. of J. M. Steel's, Clarksburg, Ont. (Fig. 1).

I don't think much of this style of an advertisement. Of course, it is above the average country paper ad., but it has very serious

J. M. Steel

J. M. Steel

It pays to buy your goods from J. M. Steel

HONEST WEIGHT HONEST COUNT, HONEST MEASURE, and your money back if everything is not found just as represented. These are some of the many good things you are sure of, at Steel's. But don't take our say so for it, ask your neighbor. Or better still, come and see for yourself. We ask your special attention this week to

COLEMAN'S DAIRY SALT. The best butter salt we know of. A cent a pound more for your butter once in a while will pay for the extra expense of using the best salt many times over. 15 lb. bags, 20c.

LUDELLA BLACK TEA. We are the sole agents in Clarksburg for this tea. It is put up in air tight pound packages, which preserve the strength and flavor till required for use. A choice blend of Ceylon and India teas that pleases everyone who likes a good strong tea.

DWIGHT'S SODA. The old reliable "Cow" brand. We sell no other soda because we know that Dwight's is the best. Regular size packages 5c.

CLARK'S CORNED BEEF, in 2-lb tins, 25c. a tin. You can always depend on Clark's canned meats being good.

CASTILE SOAP The genuine French article, 5c. a cake.

GOLDEN FINNAN HADDIES, in 2-lb flat tins, 2 tins for 25c.

MEN'S KID GLOVES, unlined, in tan only, 50c., 75c., and \$1.00 a pair.

MORSE'S OATMEAL SOAP. We recommend it, 10c.

WE HAVE JUST RECEIVED A SPLENDID LINE OF COTTONADE PANTS. THEY ARE IN GOOD DARK DRESSY PATTERNS. SOME ARE IN BLUE WITH BIB ATTACHED.

J. M. STEEL, CLARKSBURG

Fig. 2.

faults. In the first place, it leaves the impression on the mind that Mr. Steel is afraid to quote the prices on at least half the articles mentioned. Why should not the price of Morton's herrings be quoted as much as the price of Clark's corned beef? The three most important items in the ad., judging by the type, (salt, soda and tea,) certainly ought to have prices quoted for them, unless, perchance, Mr. Steel is sole agent for the three brands mentioned. Even then, prospective purchasers ought to be told how much money the things will cost. Neither are we told, for example, what Ludella tea is like—whether it is a Ceylon, India or a China tea; or whether it is a package tea or a bulk tea. Another fault of the ad. is the double rules run across both columns. These rules have the effect of fencing off the rest of the ad. from the name at the bottom.

Supposing that Mr. Steel's ad. had been written something like Fig. 2.

Here is an ad. (Fig. 3) from far-away Victoria, B.C., on which my criticism is desired. The man who wrote this ad. is evidently no

novice in ad.-writing. Taking it all round it is a pretty good ad. It would have been an improvement if the ad. had been all about clothing or all about underwear. Either of these subjects are quite

Suitable Clothes

Mean comfort and peace of mind. You can't afford to wear unsuitable clothes. Our stock is full of suitable things in men's, youths' and boys' wearing apparel. Take Serge Suits; like all other clothes, there are good, medium and trash. "Our Kind," the good kind; prices \$6.50, \$8, \$9 and \$10 the suit.

Underwear.

Our underwear department is now complete. Underwear to be comfortable must fit. If your outfitter can't fit you, suppose you try us. We sell good underwear as low as 50 cents a garment. A special line of boys' fleece lined underwear, all sizes, \$1 per suit.

CAMERON

The Cash Clothier, 55 Johnson Street.

Fig. 3.

mediate response. It is definite information about something in particular that attracts attention and brings the business. The item of serge suits mentioned by Mr. Cameron is of sufficient importance of itself for a whole advertisement.

I have taken the liberty of re-writing the ad. as I think it ought to have been written (Fig. 4):

Cameron's Clothing.

Something you can't afford to do.

You can't afford to wear poor clothes. It is a weakness of human nature to judge by appearances. Even a dog will bark and growl at a tramp while he will let a well-dressed man pass by unmolested.

There are two ways of getting good clothes. Go to a first-class make-to-order tailor, let him take his time and charge you what he likes; the other way—the best way—is to come here.

Take our serge suits for example: a make-to-order tailor would probably charge you \$15.00 to \$20.00 for a suit that will fit you no better, look no better, and be no better than one of our \$10.00 suits. Of course we have cheaper serge suits—\$9.00, \$8.00, and down to \$6.50.

EVERYTHING IN BOYS' AND MEN'S CLOTHING AND UNDERWEAR.

CAMERON

The Cash Clothier; 55 Johnson St.

VICTORIA, B.C.

Fig. 4.

For the convenience of such of the readers of THE REVIEW as are in the clothing business I herewith offer a few suggestions in clothing-advertising literature.

It pays to wear good clothes. It pays for three reasons: First, you feel yourself to be a better man; secondly, you look to be a better man; and lastly, you *are* a better man. Is this not worth paying a little extra for?

You go to your tailor, you leave him an order, you wait a long time for the clothes and maybe they don't fit when you get 'em.

You come here, the clothes are ready to try on, we fit you in a few minutes and save you one-fourth to one-half the price.

But are the clothes as good? We say they are. If we are wrong we give you your money back.

We can't afford to be wrong.
Come and try, anyway.

What proportion of his accounts does the make-to-order tailor fail to collect? Ask him and see if he'll tell you.

But whatever the proportion is, you are taxed your share of it when you buy from him.

But when you buy here you pay for what you get only. CASH IS YOUR FRIEND.

Cash is our friend, too, and that's why we stick to it in both buying and selling.

Have you decided yet where you are going to buy your spring suit of clothes?

Come in here, anyway, and see what we have. If we can't fit you at one-fourth to one-half less than your make-to-order tailor has been charging you, we'll tell you.

Another thing we do besides fitting you is to sell you *good* clothes.

Good fit, good clothes, and the low prices that go with cash dealings are a combination hard to beat.

Come and join the combine!

* * *

About the cheapest advertising, and a kind that comes pretty nearly being as good as any, is the putting of circulars or leaflets in parcels going out of the store.

These circulars ought not to be large; 5 inches by 3½ inches is quite large enough for the largest, and most of them can with advantage be smaller.

This form of advertising is good for the special reason that it has the ear, or, rather, the eye, of the buyer at a favorable moment. She has been to your store, she has been favorably impressed, and has made her purchases. At the moment she is feeling well disposed towards you. She reads the little circular, and ten to one it has a more favorable effect on her mind than if she had read the same ad. along with several others in the columns of a newspaper.

My observation leads me to believe that comparatively few retail dealers use this form of advertising to any extent.

Of course, it is not well to put too many of these circulars in one

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.
HAMILTON, ONT.

McDONALD & ALLEN KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.
Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

parcel. One, or two, or three small ones at the very most should be the limit.

Closely connected with this form of advertising is the use of wrappers with your advertisement on it. The majority of retail dealers seem to think that it's a good thing to have their firm names printed on the outside of these wrappers in flaring type. This is a mistake. Customers are often prevented from carrying their parcels home because of this same flaring type. They don't want to be walking advertisements for someone's dry goods store. The proper way is to have a nicely worded sentence or two, dealing with some interesting feature of your business, printed in modest type. When the goods are wrapped up put the printed side of the paper inside. When the customer gets home she will be sure to see the ad. when she opens her parcel.

* * *

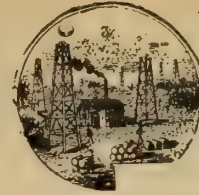
One of the pitfalls for the unwary advertiser is the temptation to say what he thinks are smart and funny things.

Even if ads. were mostly read by men this would be bad enough, for the reason that not one man in a million can write funny ads. that are any good as ads. Now, women do the most of the ad. reading and most of the buying at retail—75 to 90 per cent. of the total. It is a well-known fact that women take far too serious a view of the spending of their allowances to appreciate even genuine wit and humor when it is mixed up with the prices of dry goods, provisions and what not.

The safest and by long odds the best plan is to fill up your advertisements with plain, straightforward, business-like talk.

NEWFOUNDLAND IRON ORE AT WORKINGTON.

The Workington Hematite Iron and Steel Company have received this week a cargo of 1,200 tons of iron and manganiferous iron ores from Newfoundland. The cargo, which is the first that has been shipped to this country, has been sent over for trial purpose only, and should it prove satisfactory there is no doubt that, as most of our iron and steel works managers are on the qui vive for new sources of ore supply, a permanent trade will be developed. The freights from Newfoundland are said to run lower than those from Greece, from where the bulk of the manganiferous ore used on the West Coast comes. The island of Newfoundland has always been so associated with suggestions of "fog and cod," that its mineral resources have not received the attention they deserve.—Iron and Coal Trades Review, London, Oct. 8.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ...
Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL

TORONTO



Tandem
Anti-Friction
--- Metal

LAMPLOUGH
& McNAUGHTON

MONTREAL.



BROOM AND CORDAGE
WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties,
Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass
Work

Address—
Toronto Fence and
Ornamental Iron Works
(Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelties, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

CORPORATE MARK



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS

TORONTO, Oct. 22, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

J.L.S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. 6 25
I.X.X., " 7 50
J.R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X. 4 25
I.X.X. 5 00
I.X.X.X. 5 75
P.C., 12 1/2 x 17 3 00
D.X. 3 75
D.X.X. 5 75

NOTE.—Other brands might be shaded by 25c per box.
Ooke Plates—Bright.
Bessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base. 3 15
20x28. 6 25
Charcoal Plates—Terne.
Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 7 50
I.X., Orion 7 50
Charcoal Tin Boiler Plates.
Cookley Grade—
X.X., 14x56, 50 sheet bxs }
" 14x60, " } 0 05 1/4 0 06
" 14x65, " }
Tinned Sheets.
72x30 up to 24 gauge. 0 06 0 06
" 26 0 06 1/2 0 07 1/2
" 28 0 07 1/4 0 07 3/4

Iron and Steel.

Common Bar, per 100 lbs 1 50 1 55
Refined " 1 80
Horse Shoe " 1 80
Band " 1 75
Hoop " 2 00
Swedish " 4 00 4 25
Sleigh Shoe Steel " 2 50
Tire Steel 2 50
Machinery 2 75
Cast Steel, per lb. 0 10 0 11
Russian Sheet, per lb. 0 10 1/2 0 11
Tank Plates, 1-5 and thicker. 2 00 2 25
Boiler Rivets 4 50 5 00

Boiler Tubes.

1 1/2-inch 0 06 1/2
2 " 0 07 1/2
2 1/2 " 0 09 1/4
" 0 11

Steel Boiler Plate.

3-16 inch 2 00
" 1 90

3/8 inch and thicker. 1 75

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 2 25 2 35
26 2 35 2 45
28 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 30
All bright 2 90

Iron Pipe.

Wrought, 1/4 to 3/8 inch, 1 1/4 c.; 1/2 inch, 2 1/4 c.;
3/4 inch, 2 7/8 c.; 1 inch, 3 1/4 c.; 1 1/4 inch,
5 c.; 1 1/2 inch, 6 4/8 c.; 2 inch, 8 3/4 c.
Galvanized, 60 per cent.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge 0 03 1/2
18 to 24 gauge 0 03 3/4
26 0 04 1/2
28 " 0 04 3/4

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " 4 75
" 5-16 " " 4 00
" 3/8 " " 3 75
" 7-16 " " 3 35
" 1/2 " " 3 25
" 9-16 " " 2 95
" 5/8 " " 2 85
" 3/4 " " 2 75
Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 3/4 12
Lake Superior 0 11 3/4

Bolt or Bar.

Cut lengths, round, 1/2 to 3/8 in. 0 20 0 22
round and square
1 to 2 inches 0 18 0 19
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.
Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " 0 15 1/2 0 16 1/2
" 50 lb. and above, " 0 15 0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb. 0 21
Spun, per lb. 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p.c. off list.
From 20 gauge up, 12 1/2 p.c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c.
off list.
ests, hard-rolled, 2x4 ft. 0 20

Zinc Spelter.

Foreign, per lb 0 04 1/2 0 05
Domestic " 0 03 1/2 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/2
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 3/4
Sheets, 3 to 6 lbs., per sq. ft.,
by roll. 0 04 0 04 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 27 1/2 per cent. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Per lb. Per
Bar half-and-half 0 11 0 11 1/2
Standard 0 10 1/2 0 11
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal.

Per lb.
"Beaver" brand \$0 20
"Tandem" A. 0 19
"B. 0 16
"C. 0 10 1/2

White Lead.

Per cwt
Pure, Assoc. guarantee, ground in oil.
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 00
Brandram's B. B. Genuine 7 50
No. 1 6 75
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
No. 1 6 20

Prepared Paints.

(In 1/2, 1/2 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon. 0 90
Barn (in bbls.) 0 70
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 07
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J.F.L.S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
" Umber, " 0 10
do. aw 0 08
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2

Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb. 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs.
25-lb. Irons

100-lb. cases, do. per lb.
-lb. Boxes

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk " 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish 0 65
Extra do. 0 90
Demar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net 0 42 0 43
Boiled, per gal. net 0 45 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net 0 50
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lot 0 11

Cod Oil, Etc.

Cod Oil, per gal. 0 50 0 55
Pure Olive 1 20
Neatsfoot 90

Glue.

(In bbls.)
Common 0 07 1/2 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to 25
30 per cent off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent.
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Milita-
ry, Dom., 15 and 5 per cent.
Central Fire Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap" and
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p.c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.



CHARLES F. CLARK, President. J. CHITTENDEN, Treasurer.

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY,
Executive Offices Proprietors.

NOS. 346-348 BROADWAY, NEW YORK

Offices in the principal cities of the United States, Canada, the European Continent, Australia, and in London, England.

The Bradstreet Company is the oldest and, financially, the strongest organization of its kind—working in one interest and under one management—with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

TORONTO OFFICE.

McKinnon Building, Cor. Jordan and Melinda Sts.
THOS. C. IRVING, Superintendent

BOOKS FOR THE RETAILER

Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from *HARDWARE AND METAL*.

Necessary Books for a Retailer

By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

Any one of the above
mailed for . . . **10 cents**

New Customs Tariff

Alphabetically arranged and revised and corrected from the official copy as assented to by the Governor General, June, 29, 1897, including the old Tariff by way of comparison. Also comparative rates of the Dingley and Wilson (United States) Tariffs.—**15 cents.**

Credits, Collections and their Management

a most complete and comprehensive work of great importance to any business man.—**\$1.50.**

Address:

The MacLean Publishing Co. Limited
TORONTO and MONTREAL

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays **10 cents** to any address on receipt of

HARDWARE AND METAL, Toronto

Going to Retire? Want to Sell Out?

If so, say so in *HARDWARE AND METAL*. It reaches the most likely buyers. Two cents a word each insertion.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,
Managing Director and Treasurer

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, **payable strictly in advance.** Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

E. T. WRIGHT & CO.

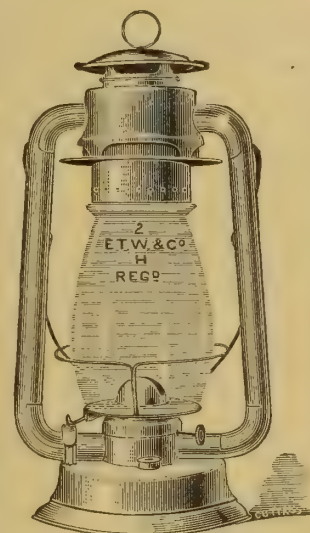
Manufacturers of .

Tubular and
Cold Blast
Lanterns

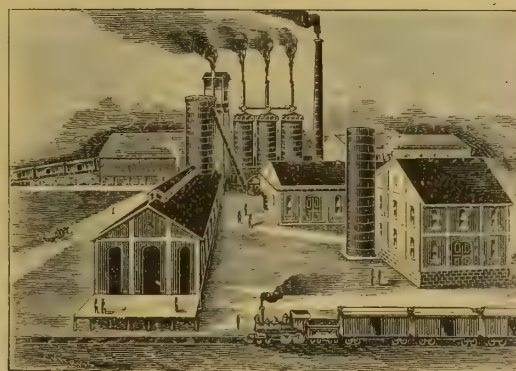
Bird Cages
Mouse Traps
Flour Sifters

Stamped
Re-tinned and
Janned

..TINWARE



HAMILTON - CANADA.

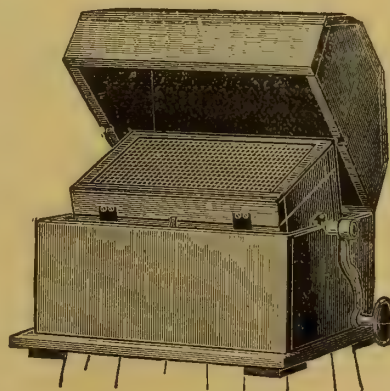


The Hamilton Blast Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

HIGH GRADE PIG IRON.



Now is the time

to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.

Manufactured
by . . .

MEAKINS & CO. - MONTREAL

Est. 1863

Inc. 1895

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

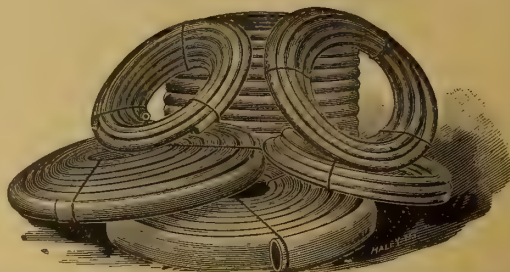
Awarded
By **JURORS** at
International Expositions
Special Prize

Gold Medal at Atlanta, 1895

WE WANT TO HEAR.



WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

Do You Require

PAINTS, OILS or VARNISHES?

Now is the time to order.
Prompt shipment guaranteed.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, Toronto

Telephones 819, 1511 and 1292.

THE PAINT MAKERS

Copper, Tin, Antimony, etc.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, OCTOBER 30, 1897

No. 44



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.

MONTREAL OFFICE—

Caverhill, Learmont & Co.

General Dominion Agents.

Owners and Sole Manufacturers,

266 and 267
West St.,

New York

IT'S WORKABLE...

Will stand double seaming, or any other test to which Iron can reasonably be put, every time.

IT'S FLAT...

You don't say "flat as a pancake" now, but "flat as 'QUEEN'S HEAD' Iron."

IT'S BRIGHT...

No second-class Galvanizing—you know it at once by its beautiful appearance, and it WEARS.

IT'S LIGHT...

More sheets to the ton than any competing brand. It is cheaper by the sheet than any other good make.

These are a few of the reasons why it is used more than all other makes put together.



CANADA.

Canada's Largest Radiator Manufacturers.

Cold Facts Choke Their Oratory.—Competitors who resort to misrepresentation when telling you about the "Safford" are often found out. It would make a horse laugh to hear some yarns repeated. The "Safford" needs no defenders. They are absolutely perfect in construction and low in price.

"Safford"

ARE THE ONLY PERFECT

Radiators

They are more expensive to make. They are, however, well made, and fully guaranteed—without a fault.

Leading All Others by Miles.

Made only by...

THE

TORONTO RADIATOR MFG. CO

Limited
Toronto, Ont.



SKATES

Write for Price Lists and Discounts.

RICE LEWIS & SON

(LIMITED)

Cor. King and Victoria Streets,

TORONTO

Anything in....

Copper

THE range of our product is from the smallest article possible to make to the largest work ever used or required.

COPPER WORK

made to any desired specification or design.



We have always on hand a large stock of

Sheet Copper and
Copper Tubing

CORRESPONDENCE SOLICITED

THE BOOTH COPPER CO.

Limited.

TORONTO

Keep a Little
Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price,

NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP

Are you ready for the Fall
Trade in this line?

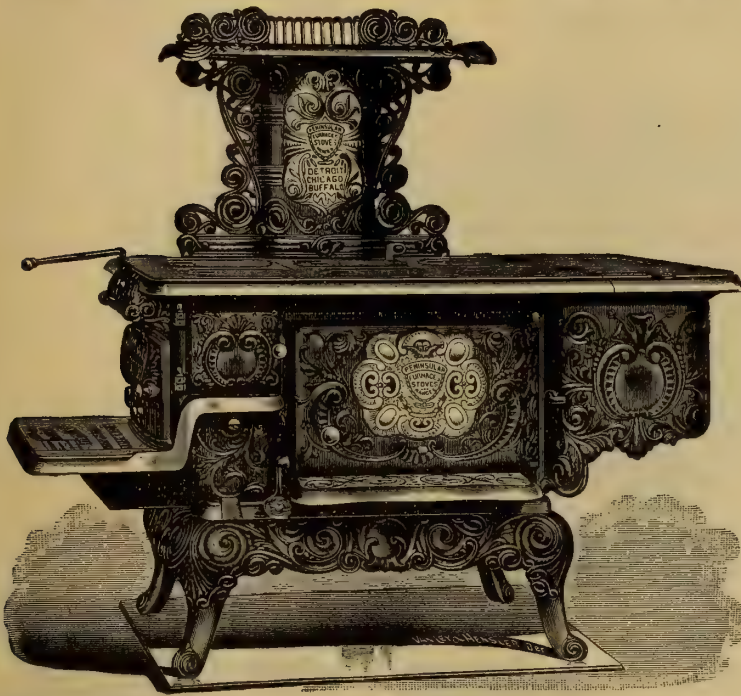


Patented 1896

KEMP MANUFACTURING CO.

Toronto

NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new goods with same dress as the Granite Range, which is acknowledged to be the prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO. - - PRESTON, ONT.

Clearing Sale..

♦♦♦
**IMPORTANT
 ANNOUNCEMENT
 TO THE
 HARDWARE
 TRADE**
 ♦♦♦

Owing to a change of business there will be a **Great Clearing Sale of the Bowman, Kennedy & Co., Hardware Stock**, amounting to seventy thousand dollars.

From Monday the 11th to the 30th of October this stock will be offered without reserve.

This will be a great opportunity to purchase your fall stock of hardware. The above stock has been **bought for cash when values were the lowest**, and as goods are now advancing there could not be a better time for buying.

A visit to the warehouse will be to the buyer's interest. The stock consists of **General Hardware, Sporting Goods, Glass, Paints, Oils, Varnishes, Silverware, etc.**, all of which will be cleared out. **This will be the most important clearing sale ever held in the Province**, as the stock is new and well assorted. Orders filled as received and accepted subject to stock not being sold. Yours truly,

Bowman, Kennedy & Co., London, Ont.

ALWAYS COLD.

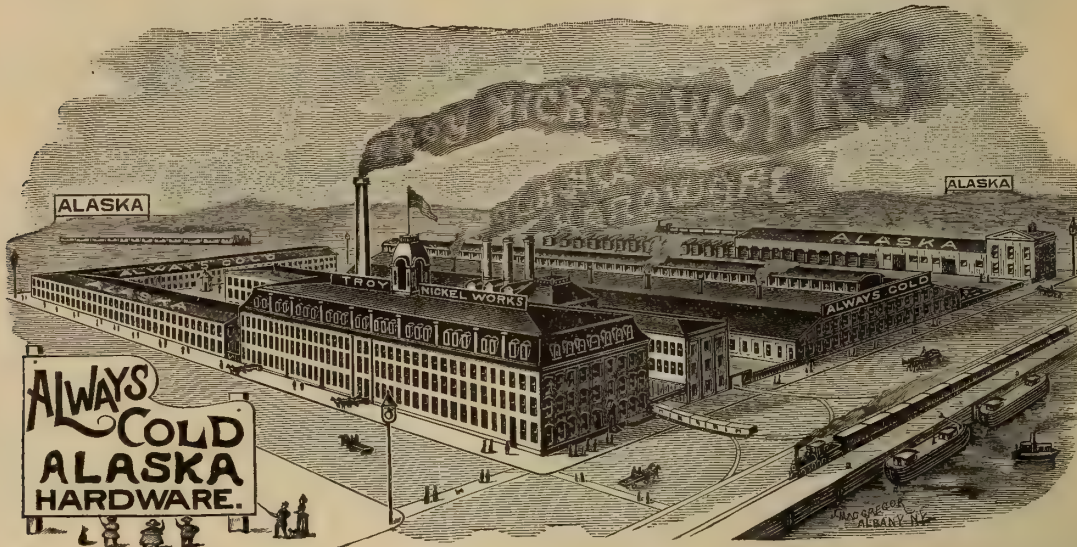
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc., Etc.



To Canadian Trade

If your jobbers don't carry this line send to us for prices. We will land the goods at your door. WRITE US ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

This range always gives
unbounded satisfaction.

THE

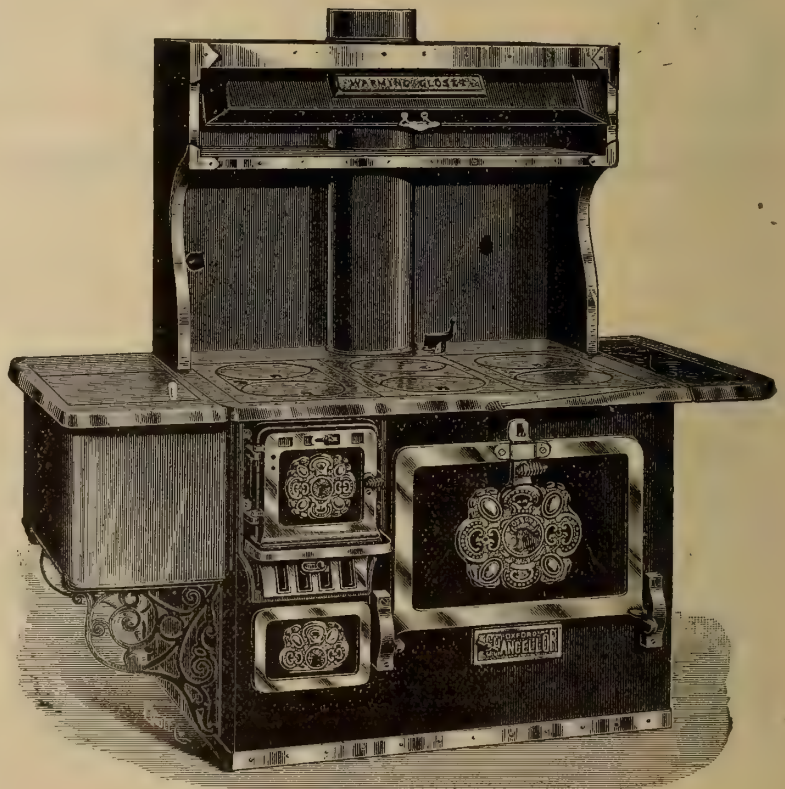
Oxford ... Chancellor

is of heavy steel plate—an ideal farmer's stove that will burn the coarsest wood.

Extra large fire door, large 24 x 22 x 15 oven with balanced drop door.

Ornamentally finished, perfectly ventilated, quick working and economical.

If you aren't handling the Chancellor write us at once for fuller details—it sells on sight.



The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



J. BAYNE MacLEAN,
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FAMINE IN PULP.

THERE is almost a famine at the moment in pulp on the American continent. This one would think impossible, in view of the plentiful character of pulp wood on this continent, and in Canada particularly. But it is true, nevertheless. And an undoubted authority is **HARDWARE AND METAL'S** informant.

The cause of the famine is not, however, the scarcity of pulp wood; it is the want of water which has prevented the mills from turning out their usual quantity.

So keenly is the shortage being felt that we know of mills that could not ship a carload of pulp, while it is understood that the manufacturers at the Sault are getting \$25 per ton for what they can produce.

The people at the Sault Ste. Marie mills are daily receiving cable and telegraphic orders to ship every pound of pulp they can spare outside their contracts, regardless of the price. The cables and telegrams are, as a rule, from Great Britain and the United States, but some have come from far-off Japan.

Owing to the difficulty of securing pulp, some of the paper makers are refusing orders for wood-board.

IMPORTATION OF SOUTHERN PIG IRON PROHIBITED.

A MOST important step has been taken by the Dominion Government in regard to the importation of pig iron, the manufacture of certain furnaces in the Southern States of the American Union.

It is perhaps not generally known, but it is a fact nevertheless, that convict labor is used in the manufacture of pig iron at certain southern furnaces.

According to the information in the possession of the Dominion Government the pig iron makers employing this class of labor are: The Sloss Iron and Steel Co. of North Birmingham and Birmingham proper; and the Tennessee Coal and Iron Co. of Bessemer, Oxmore, Birmingham and Ensley City; while the brands of pig iron made by these firms are: "Ensley," "Woodstock," "de Bardleven," "Pioneer" and "Woodward."

In pursuance of a clause in the Tariff Act of 1897, the Customs Department has issued a notice to the collectors at the various ports of entry instructing them to prohibit the entry of the above named brands of pig iron.

Since these instructions were issued a few days ago a rigid inspection has been established, with the result that several lots have already been stopped at the border, while we know of one large importer in Toronto who has written to one of the southern furnaces cancelling an order which he had placed with it for pig iron.

The action of the Government does not apply only to pig iron, but steel as well, that may be manufactured by convict labor.

As a result of this step of the Government another nice point has arisen: It is contended that the prohibition should extend to radiators imported from the United States, as into the manufacture of these radiators there enters southern soft pig iron made by convict labor. This point is, **HARDWARE AND METAL** understands, now being considered by the Customs Department.

The clause in the Tariff Act under which the importation of the convict-made pig iron and steel is prohibited in section 641, Schedule C. It reads as follows:

Goods manufactured or produced wholly or in part by prison labor, or which have been made within or in connection with any prison, jail or penitentiary; also goods similar in character to those produced in such institutions, when sold or offered for sale by any person, firm or corporation having a control for the manufacture of such articles in such institutions or by any agent of such person, firm or corporation, or when such goods were originally purchased from or transferred by any such contractor.

From a perusal of this paragraph we are of opinion that not only is the Government of the Dominion right in prohibiting the importation of convict made pig iron, but of radiators or any other article whatsoever in the manufacture of which this iron is used.

Clause 641 distinctly says that the importation of "goods manufactured or produced wholly or in part by prison labor" are prohibited. Now the radiator in the manufacture of which convict-made pig iron is used is obviously partly made by convict labor. The radiator could not be made without pig iron, that is sure; and the solution of the question as to whether the radiator is made from pig iron produced by

convict or free labor determines whether or not said radiator is produced "in part by prison labor."

Suppose a radiator manufacturing firm made its pig iron from which it created the finished product, and that prison labor was used for operating the blast furnace, while the moulding shop in which the radiator is made was operated by free labor, there is scarcely any question as to what the decision of the Government at least should be, whether the blast furnace was near by or five hundred miles away. Here is a case where the prison-made pig iron, while not produced by the same people who make the radiator, is nevertheless bought by the manufacturer of the latter article and is used by him in its construction.

Where is the difference? Morally, at least, there is none. The line of action the Government should therefore take in regard to radiators and other articles into the manufacture, of which convict-made pig iron enters, seems to us clear.

WILL WIRE NAILS ADVANCE?

IT seems certain that the consumer is not going to get cheap wire nails much longer. This was inferred in last week's issue, and events since then have strengthened rather than weakened this view.

The appreciation in wire rods, the makers' raw material, has been continuous in the States, **HARDWARE AND METAL** some weeks ago referring to the fact that the rise from the low point had been equal to \$6 per ton. Since then, however, there have been further gains, and to-day wire rods at point of shipment in the States cost \$24.50 per ton. Taking this price and the duty and freight, makers certainly do not have much of a margin on wire nails at \$1.75, the price at which car-load lots are now selling at the mills.

Some of the makers have lately refused to book large contracts ahead at the existing prices. Leading jobbers who considered wire nails a good speculation at prices now ruling, desired to place contracts for all the way from 2,000 to 5,000 kegs. The makers, however, refused to rise to the bait, and all that the prospective purchasers could close was 500 kegs or so.

This certainly looks as though the makers were considering the question of higher prices in the near future.

A GLARING INEFFICIENCY.

A COUNTRY without efficient commercial laws, like a country without efficient criminal laws, is not in an enviable position.

Canada is a country whose commercial laws in one particular are so glaringly inefficient as to injure its financial standing among the merchants of Europe.

The peculiar deficiency is the absence of a Dominion insolvency law. Canada has been in this condition about eighteen years, notwithstanding that the Dominion Parliament, the only legislative body in the country having the power to enact an insolvency law, has been importuned again and again by the Boards of Trade and other commercial bodies to supply the desideratum.

The old insolvency law was created in 1875 and repealed in 1879. The reason for its repeal was its bad reputation; and what was the cause of its removal from the statute book has no doubt helped to keep a successor off the statute book, well and carefully built as were most of the bills designed so to take its place.

Within the last few months the business men of the country who recognize the necessity for a Dominion insolvency law have again become aroused. They are no longer in the mood to importune. They are in the mood to demand what is an inalienable right.

In previous movements of the kind the motive was to secure the passage of a law for the benefit of the business men of the Dominion. While this motive is in evidence in the present movement, yet a new and an important one is being exercised. We have reference to the consideration of the interests of the manufacturers and merchants in Great Britain, with whom our desire to do a larger business was so greatly stimulated by the preferential tariff adopted some months ago.

That the interests of the creditor class abroad doing business with Canada are not properly protected is known to all men. Not long since an importer in a commercial centre in Canada wrote to his English creditors, told them he could only pay them 40c. on the dollar, and enclosed a cheque to each for the amount of his indebtedness minus 60 per cent., while to his creditors in Canada he paid 100c. on the dollar. This

is only one of similar instances **HARDWARE AND METAL** has heard of. But the creditors in these instances were fortunate, indeed, compared with some who never received one cent on the amounts due them, not forsooth because the debtors were always dishonest, but because the law was always deficient, and allowed unscrupulous and selfish creditors to guard their own interests at the expense of their fellow creditors. For instance: A short time ago a retail merchant doing a large business in an Ontario town was induced by his chief creditor to give him a mortgage covering stock, real estate and everything in sight and out of sight. By-and-bye the mortgagee quietly sold out the business and pocketed the proceeds. When the other creditors became aware of what had been done, and went to the mortgagee to try and get him to share with them the proceeds of the sale, they were met with an emphatic No.

With such a state of affairs as this existing it practically means a reign of terror in a commercial sense. And it is a realization of this fact that is helping on the present movement.

A striking feature of the agitation now being carried on is the strong feeling in favor of the abolition of preferences. One thing is certain, the practice of giving one creditor a preference over another has been a great evil, but whether it should be made unlawful is another question. The practice has undoubtedly earned a bad name, and unless preferences can be surrounded with proper safeguards that will prevent a continuance of the abuse of the system now so common it would be infinitely better that it should be forbidden altogether in any future legislation that may be enacted.

Another thing that in future legislation great care should be taken in regard to, is the matter of assignees. Official assignees were the curse of the old insolvency law, and the lesson then taught should not be in vain. The insolvent should assign to the sheriff, whose duties would end after the first meeting of the creditors, the matter of the appointment of a permanent assignee being left in the hands of the latter.

The discharge of an insolvent is another delicate question. The man who is dishonest is entitled to no commiseration; but it is not so with the honest but unfortunate

merchant. Every honest insolvent who has surrendered everything to his creditors is, other things being equal, entitled to a discharge. The amount on the dollar he shall pay in order to qualify for a discharge is difficult to determine. It seems to us that the law in this respect should have some elasticity, and that while the creditors should have a voice in either granting or denying a discharge, yet we think the final voice in the matter should be that of the court.

The snag which caused the destruction of the last insolvency bill introduced in Parliament was the opposition of the bankers, who seemed determined it should not become law unless they were given special privileges. They wanted to be doubly protected. In other words they assayed to rank on two estates. Under the insolvency law of 1875 they did, with the result that they sometimes got more than one hundred cents on the dollar.

The banks, by playing the hog, wrecked one attempt to secure an insolvency law. They should not be permitted to stand in the way of any future attempt.

The demand for an insolvency law is a just one; the demand of the banks to rank

on two estates is an unjust one. The Government should be the judge in the matter, and at the next session of Parliament introduce and carry through an insolvency law applicable to the whole country.

A FAKE ADVERTISING SCHEME.

THE advertising fakir goeth about as a roaring lion seeking whose dollars he may devour. He never sleeps and he is omnipresent. He may change his tactics, but behind the mask is the same old fakir. But everybody does not recognize him all the time, and consequently there are some people who are being victimized by him nearly all the time.

We have been induced to make these remarks by the receipt of a circular which a wild west hippodrome concern is distributing among manufacturers and merchants in Canada courting an advertisement from them. In return for good Canadian money the proprietors of the "wild and woolly west" show offer to paint in big letters on the top of their tents the advertisement of anyone whatsoever who will comply with the conditions demanded.

We do not know whether they have se-

cured any victims. If they have not, they doubtless will, for to have one's name in large letters on a tent where thousands of people can see it from day to day is very alluring—to the man who does not think.

But the man who does think knows that faking is not advertising. And tent-top advertising is fake advertising.

People who go to "wild and woolly west" shows or any other shows go there for the purpose of seeing what is within the tents and not what may be on the top of them. They are not interested in groceries, hardware, dry-goods, etc. It is on the show their attention is centred.

The newspaper is the proper medium for advertising. And it is infinitely better to put an advertisement in a poor newspaper than on the roof of a good show. The columns of a newspaper is the natural medium; the roof of the show is the unnatural medium.

The best thing for the circular in question is not consideration, but the waste paper basket.

The free silver men are looking after their own pockets. They may, therefore, be said to have an eye for gold.

THE ONLY WAY

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

INCREASING SALE OF FURNISHINGS

STANDING out from the departments which are more or less affected by certain seasons of the year, the goods of general furnishing ironmongery are always in demand, and, therefore, call for special care. Implements, sports, travelling requisites, etc., are goods which come in for spasmodic sales, and where every effort is made to bring them before the public in a persistent manner good results may always be attained; but the department now in question is the staple portion of every ironmongery business. This covers a wide area, and has in itself a wonderful variety, from tacks to bedsteads, from fire-irons to electroplate. There are many ways of dealing with this section, and though my own opinions may not coincide with those of the majority of your readers, I have succeeded in making this department very productive of that happy point at which all of us aim, and so many of us miss—viz., satisfaction. Taking as my motto, that goods properly kept are half sold, I have always taken special care, and induced all hands to do the same, to carry out these invaluable conditions of success. For instance, money expended on the purchase of an air-tight case for brass and electroplated goods is a good investment in itself, and allied to this there must be a rule that all articles kept in the case must be carefully rubbed with a Selvyt cloth or leather after being shown to customers, so that no finger-mark is left. The same remarks apply to cutlery and planished goods which quickly deteriorate if neglected. While advocating the display of such goods as scissors, pen and pocket knives on a shelf in a glass case, I always find it best to show samples only of scissors in this way, the reserve stock being kept in parcels containing perhaps two sizes, the contents being noted outside, and the parcel numbered. On a line with these parcels a card should bear the particulars as follows: "Scissors 5½ inches and 6 inches, Parcel No. 1, Drawer No. 2," so that where there are none suitable in case, the right thing can be procured quickly. Among the many means of making this department successful, three at least are very necessary—viz., good display, judicious advertising, and soliciting orders. In view of the fact that the sale of these goods is not particularly affected by seasons, it is advisable to have always a good display in the shop, which is the keystone of the establishment, and change such displays very frequently.

WINDOW DISPLAY.

It goes without saying that this is of paramount importance. What I have found to give very satisfactory results is, to arrange

furnishing ironmongery in sets of varied prices so as to be suitable for cottage or mansion, and dealt with in the way I shall mention in my remarks later. Next to the importance of having goods placed in the most conspicuous position is that of having them so kept that they may be introduced quickly. To wit, it may not be convenient to always have on show picture and curtain hooks, cornice-pole brackets, brass head and fancy nails, etc., but it is quite easy to have a sample of these mounted on a small board, covered with baize, and to introduce them to likely purchasers. The same may be said of portiere rods, which cannot probably be shown in large numbers, but one of each pattern kept in stock might easily be shown in action, or fastened to the front of the counter or elsewhere. Brass finger-plates, and lock-furniture, too, when mounted on pieces of wood and covered with velvet, by being kept in glass cases or wrapped in a Selvyt cloth, are much more easily brought under the notice of the customer than by having to reach down the parcel containing the whole stock, which involves too much objectionable fuss. Again, it is seldom possible to keep the full stock of tinned and galvanized hollow-ware to the front, but a useful set of saucepans may be displayed together, attention to which may be drawn by a card on which may be noted "This set of saucepans complete, 10s. 6d.," also price separately; or wash-ups, oval baths, treated in the same way, all help to achieve the object of these remarks. Very frequently it is wise to send such an article as a carpet sweeper or other domestic machine to the largest hotel or private residence in the district, with a request that it may be given a trial, and secure a written testimonial from such user, and "rush" it by special display, special advertising, etc.

ADVERTISING.

I have never failed to find that it pays to talk through this medium. By its aid the public are reached, and their attention secured in such a way that no other means will. Therefore, my advice is use it wisely and well, in local papers and by circulars; but what is better than separate circulars, in my estimation, is a specially-prepared illustrated list of furnishing ironmongery which may be purchased at a low cost. One thing is worth noting in connection with this, that efforts should be made to have the goods in stock exactly as the illustrations, or it may lead to annoyances that will be detrimental to trade. Another good means of reaching buyers is to have a glass-fronted case in which there may be knives, forks, spoons, etc., marked in plain figures at the railway stations, and besides the name and address a notice "Trains and 'buses free to purchasers at this address." Similar

cases at all principal hotels bring grist to the mill. When bill-posting stations are taken advantage of I have found it best to use only large placards, as it is a waste of money to have small ones for these particular places. With regard to the arrangement of furnishing ironmongery: These should be in sets from, say, four guineas for cottage and vary upwards; when one set is being exhibited there should be an advertisement calling attention to it, and mention made of the date when the more expensive sets will be on view in window.

SOLICITING ORDERS.

Doubtless this is a very important step, and one leading to much business with hotels, mansions and the larger residences. I have found it bring its own compensation for any trouble taken in these steps. The calls should be periodical, say once a month, and any useful novelty which may have come to hand should be taken by the salesman and introduced by him to the probable purchaser. I have known such special articles as raisin-seeders, pea-shell-ers, apple-parers, to be sold quite largely when taken at the right time.

Always bearing in mind the utility and value of the workshop in its relation to the ironmongery trade in general, and the furnishing department in particular, special efforts should be made to secure the repairs of all kinds, retinning of copper goods, etc. These should be made a note of, and sent at the earliest moment. I find it advisable to observe courtesy and give attention to the servants of large establishments, as it is often the way through which there comes a great deal of business. Further, I find it well to acquaint myself with house and estate agents, so that I may become acquainted with the changes of house tenants, and thus may follow with lists, prices, and soliciting orders for new goods and repairs, as there are sure to be certain wants under these circumstances. All notices of marriages it is well to take advantage of in the same way.

Before closing my remarks I would like to add how very important (and especially in relation to this department) it is that the pattern books be so kept that any employee may be able to find any pattern book, and of any particular maker of special articles, in a moment. In these days it is impossible to have in hand all the goods which ironmongers are apparently expected to keep, and it is certainly imperative that any salesman should be able to produce the pattern book showing the illustration of the article required. It is a fatal mistake to have pattern books in the chaotic muddle that some tradesmen have them, though I will not presume to give any views on that important subject, as many excellent ways have been set forth in *The Ironmonger* already. —G.H.T. in *Ironmonger*.

THE TURPENTINE DISTRICT.

By WILLIAM H. EVANS.

THE pine tree, from whence what is commonly known as spirits of turpentine is produced—as far as the American continent is concerned—flourishes in the large sandy districts of the states of North and South Carolina, Georgia and some parts of Florida. Savannah is the chief shipping port, but large shipments are also made from Charleston and Wilmington.

The *pinus australis*, or long leaved pine, although comparatively still abundant in some sections, is being most unmercifully "farmed" or tapped for turpentine, and unless the woods are conserved one of the richest sources of the south will be seriously endangered. As is well known, turpentine is very extensively used in the manufacture of varnishes, japans and paints. It is also used medicinally, both internally in small doses and as a liniment in throat and lung complaints and in rheumatic and neuralgic cases. The rich odor emanating from the pine forests is also extremely beneficial in bronchial troubles, and there are several invalids' resorts among the pines in South Carolina and Georgia, especially for people affected with chest affections. Turpentine is obtained, to be brief, by making an incision or pocket in the pine tree, into which the crude "turps" or sap flows. This is gathered and transported to the stills for distillation. A visit to one of these stills in the pine forests or "piney woods," as they are locally termed, is extremely entertaining.

The "works" are of a most simple and rough character, but those who delight in seeing nature yielding one of its most interesting products, even by crude artifice, are amply rewarded by a survey of the unique and interesting surroundings. The colored gentry who work at the "stills" are a jolly lot, and will meet the visitor cordially, especially if the "white gemmen from de north" is of a genial character and can crack a joke, produce a flask of "benzine" or has a pouch full of the fragrant weed. In this out-of-door life, producing turpentine and the various products which go under the head of naval stores, one sees the negro at his best, and I have seen some handsome "darkeys," magnificently proportioned, strong as lions and full of agility and "go." The country negro is far ahead of the town-bred article for physique. Before the war, although he had no luxury, the negro was reasonably comfortable, and his surroundings and mode of life were more healthy than they often are now. He lived in the country, whereas he now crowds into the towns; his log cabin let in more air than the houses in which he now often dwells. Stoves and furnaces

were unknown in the south, with their dry and pernicious heat, cheery open fire places with resinous pine logs being mostly in vogue. Consumption was rare, but acting as waiters in super-heated rooms is killing their vitality rapidly. Sambo was fairly well fed in the old days and happy in his environment; he was debarred from many excesses in which he now indulges without stint. The pure Africans are becoming fewer in number, and the gradual admixture of white blood tends to deteriorate them and destroy their stamina. The pine district of the south is very much frequented in the winter season by visitors from the north who wish to escape the rigors of a northern climate. At certain seasons the character of the scenery is very picturesque, with the cotton fields, oaks, magnolias, myrtles and jasmines. The trailing arbutus, the creeping and climbing vines are profuse and lend a charm to the landscape.

There are a number of towns and resorts in which to spend a pleasant sojourn. Aiken, S.C., is a favorite resort. The surrounding country is somewhat hilly, the ground high and the air dry and healthful until about the first of May, when the heat becomes trying and the insects decidedly annoying. Savannah is the chief shipping

point for turpentine, and is a beautiful place, well laid out, with some very pretty drives. Wilmington, North Carolina, and Charleston, South Carolina, are both coast towns from whence "spirits" are exported in large quantities, and are interesting places largely patronized by northern tourists on the journey to and from Florida who desire to get acclimatized by easy stages. Charleston is a nice stop-over point, and is full of historical reminiscences. Here is Castle Pinckney, the ancestral home of the author of the saying in revolutionary times "Millions for defence but not a cent for tribute." Fort Sumter, where the first gun was fired in the civil war, April 12, 1861, can be visited by ferry boat. A promenade on the battery or sea wall, which looks out into the harbor, is very enjoyable and refreshing on a cool spring evening. St. Michael's Church is a grand edifice, having numerous monuments and "brasses" inscribed with names and having associations dear to the heart of the hospitable southerner.

The latest addition reported to the long list of bicycle manufacturers is the Alaska Cycle Co., which will open out in London, Ont., early in 1898. They will handle bicycles called the "Yukon," "Cariboo," and "Klondyke."

Two Years Ago

on the first day of November next we began making
THE SHERWIN-WILLIAMS PAINTS in Canada.

We have done very well here during that time—this year we are only a little short of **doubling** the sales of our products over last year.

We have demonstrated beyond a doubt that there is a market here for the very best grade of paints; that a firm making only one grade—the very best—can do a prosperous business here.

In most cases we have helped our dealers to increase their paint business. We can do it in **every** case where a man will take hold with us and use intelligently our methods for getting more business. Our methods get the business—our goods hold it and increase it.

If you want to reap all the benefits from the good times that are now here, you ought to be handling our goods and getting the advantage of our business methods.

THE SHERWIN-WILLIAMS Co.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.CLEVELAND
CHICAGO
NEW YORK
MONTREAL

CALCULATING THE POWER OF WATER.

ALTHOUGH for many centuries water has been employed for motive power in all the industries in which man are engaged, says a writer in American Miller, there are yet many people vitally interested in its use who know but little of the natural laws governing its utility, or how to estimate and measure its power.

Most practical men know something about weir dams, and are able to make a comparative estimate of the volume of water available for constant power purposes, but being unfamiliar with the laws controlling the motion of fluids, are unable to calculate the working energy that a given volume of water under a given head or fall is capable of producing. This is determined by the weight and velocity of the water. The weight is an unvarying factor, a given quantity always weighing the same, but the velocity varies according to the height of column or head. The initial velocity of spouting fluids is directly as the square roots of the heights of the columns, or of the pressure. It being known that the initial velocity under a 4-foot head is 16.2 feet per second, and that the square root of 4 is 2, we proceed to ascertain the spouting velocity of any other height by taking its square root and dividing it by 2, the square root of the 4-foot head, and multiplying it by 16.2, the spouting velocity of the 4-foot head. Take, for example, a head 16 feet high, the square root of which is 4, we divide it by the square root of 4, which is 2, multiply by 16.2 and have as a result 32.4, which equals the spouting velocity due to a 16-foot head of water.

By the same rule we find that the spouting velocity due to a head 64 feet high is 64.8, because the square root of 64 is four times greater than the square root of 4, therefore the velocity must be four times greater than the velocity due to the 4-foot head. The initial spouting velocity of any other head of water can be ascertained by the same method of calculation.

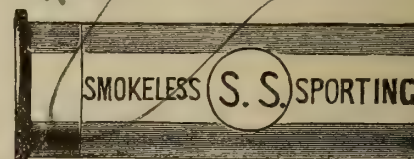
Spouting velocity presents a rather peculiar phase of the water power question when thoughtlessly viewed. Measured by spouting velocity alone, it would appear that there is a relative loss of power as the height of the column of water increases. A 64-foot head is 16 times the height of a 4-foot head, and yet the spouting velocity of the former is but 4 times greater than the latter. It must be remembered, however, that while the spouting velocity has been increased but 4 fold, the pressure has been increased 16 fold, so that as against say one velocity and one pressure in the 4-foot head we have in the 64-foot head four velocities and sixteen pressures,

which means a marvelous increase in power instead of a relative decrease. It means that a water wheel which would develop a two horse-power under a 4-foot head, would develop a 128 horse-power under a 64-foot head. Thus it will be seen that by raising the head 16 times we increase the power 64 times, a fact which seems quite astonishing to the uninitiated. It is due, however, to say that while theoretically the power is increased 64 times, the efficiency of the wheel under the high head is not in so great a proportion, on account of increased friction due to its greater speed.

The speed of a wheel increases with the velocity of the water, therefore the speed of a wheel under a 64-foot head would be four times greater than it would be under a 4-foot head. This brings us to another phase of the subject that must not be overlooked by the student desiring full and correct information. While the 64-foot head develops 64 times as much power as the 4-foot head, four times as much water is consumed in doing it. When a given quantity of water is consumed in both cases, the power of the 64-foot head is but 16 times that of the 4-foot head, or in exact ratio to the heights of the head. To make it plainer, a given quantity of water in a 64-foot head will develop 16 times the power that it would in a 4-foot head, because the former head equals 16 times the height of the latter.

TRIAL OF SHEFFIELD ARMOR PLATES.

Two armor plates, manufactured by Charles Cammell & Co., of Sheffield, were successfully tested on board the Nettle target ship, at Portsmouth, recently, in the presence of Sir Wm. White, director of naval construction, and various representative gentlemen. The first plate tested was 6 inches thick, with a superficial area of 8 feet by 6 feet, backed in the usual manner. The plate was fired into at a range of 30 feet five times with a 6-inch breech-loading gun, the 100 lbs. Holtzer forged steel, armor-piercing projectile being used in each case. The penetrations ranged from $2\frac{1}{2}$ to $2\frac{3}{4}$ inches, but as no cracks were developed the plate was capable of resisting five more projectiles under the same conditions. In each case the velocity was 1,960 feet per second, and the projectiles were broken into small pieces. The second plate was 4 feet square and 4 inches thick, and against it three rounds were fired from a 5 inch breech-loading gun, the projectile weighing 50 lbs. At the first round the projectile had a striking velocity of 1,400 feet per second, and at the other rounds of 1,750 feet per second. At each round the projectile splashed on the face of the plate, and while the shells were pulverized the plates were only scratched. No cracks were developed, and, as the plate was uninjured, the results in both cases were regarded as highly satisfactory.



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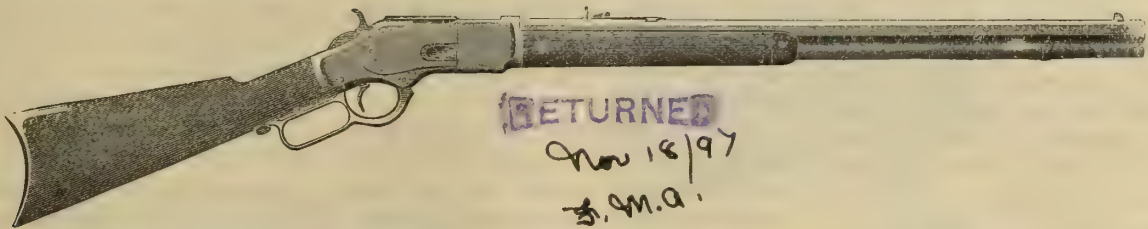
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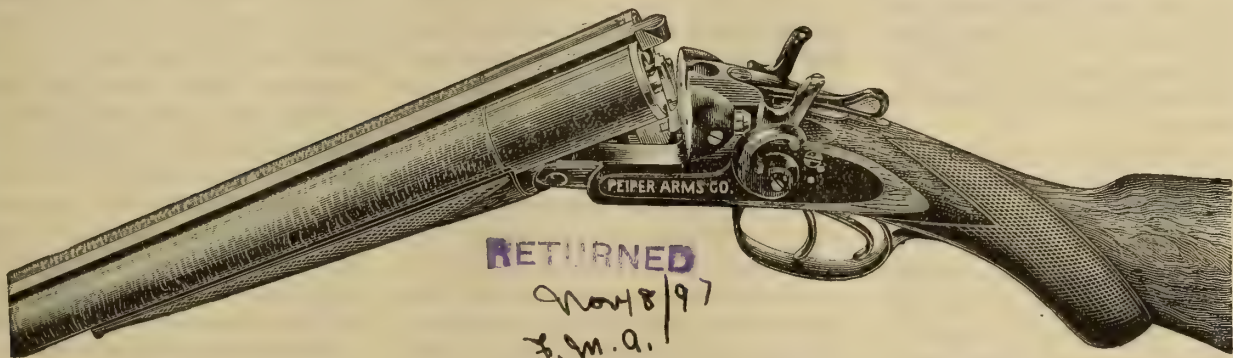
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THE PERPLEXITY OF THE RETAILER

IT must be apparent to every observant retail hardware dealer that his business is passing through a crisis of so serious a nature as to demand his utmost thought and attention, writes a merchant in Iron Age. The stress is naturally greatest in the large cities, for the phenomena of commercial evolution find earliest expression and widest expansion in the great centres of population. The first serious loss is the steadily diminishing trade in all carpenters' and edge tools, and this, from causes often pointed out before, will grow worse instead of better.

There is some compensation in the growing demand for machinists' tools, but unfortunately for both jobber and retailer many large factories using these tools often buy direct from the manufacturers themselves.

In builders' hardware, outside of the cheaper grades, the trade is fast becoming centred in those large dealers who are equipped with salesmen, samples, information and prices necessary for the handling of this complicated line. In fact, the proper presentation and sale of the artistic hardware that is now the necessary accompaniment of every large or fine building is so much a specialty that the average retailer is forced to abandon it to the one who has made it a study.

In house furnishing goods and all the numerous small hardware that the householder uses, the trade is fast being absorbed by the department store, with which the retail hardware dealer can never successfully compete as long as he clings to his present methods.

In the country matters are much better, and will probably always continue so, but the difference is only in degree and not in kind. As villages and towns grow larger, the changes we have noted will be felt with constantly increasing pressure. Our sympathy with the retailer should not blind us to the fact that no artificial methods can be of service to him whatever. No associations, however strong or numerous, will ever prevent the department stores from obtaining all the goods they want or in any way curtail the scope of their operations. To invoke legislation is merely to invite a failure such as was witnessed in Illinois a few months ago.

Whatever may be the evils of the department store, it is but an expression of the economic tendency of the times, since it represents the power of concentration of economy and of discipline. In its position of cheapening the cost of goods to the consumer it is absolutely unassailable, since it is thus in perfect accord with all the forces of modern civilization.

The way out of the plight into which

the retailer has fallen does not lie in a hopeless war with modern methods, but in a clear comprehension of the drift of the times and in adaptation to his new environments. The only remedy that is at all apparent is along the lines of expansion and increase in variety. This has been clearly apprehended for sometime by all the successful manufacturers and jobbers, for it may be stated, as a broad generalization, that the day of the specialist, as such, is fast passing away in the commercial world. This is the more significant because of the exactly opposite tendency in the professional world, but the reason is not far to seek. It may be set down as an axiom that the very first requisite for extended success in business is executive ability, even knowledge being secondary by comparison. Thus, it has been found possible to combine many specialists, each in his own department, under one executive head, to much better advantage than if each specialist was operating solely on his own responsibility.

Neither manufacturers nor jobbers have courted this growth in variety, for it is much more economical to expand from the inside than to grow by accretions from the outside, but it has absolutely been forced upon them if they were to grow or even hold their own. Those firms who clung to old methods, and were content to sell nothing but hardware, are finding that their business is fast drying up. The same tendency toward expansion in variety is just as strongly marked in other lines of business, such as dry goods, groceries and the like, as in hardware. The successful retailer of hardware has almost unconsciously been pursuing the same plan and handles great numbers of articles that 20 years ago were regarded as entirely foreign to his business. Only by a continuation and extension of this policy can he hope to solve those problems which now confront him. He must learn, moreover, to disregard that old fallacy which confined a dealer within the limits of his so-called "legitimate" sphere, since common sense dictates that within the requirements of honesty and decency a dealer may handle anything that is profitable to him and advantageous to his customers.

THE REPAIRING DEPARTMENT.

AS the general and particular business of an ironmonger increases and extends its boundaries, so also must the importance of the repairing department be augmented. It is, perhaps, going to extremes to say that whatever an ironmonger sells he ought to be able to repair, but with some few exceptions the assertion may be said to be accurate. There is a small number of machines and other articles which

the ironmonger cannot be expected to repair or renovate on his own premises, but even in those instances it is possible for him to have such arrangements with the manufacturers as will ensure promptitude and accuracy in all work of the kind. Leaving these exceptions out of the question, the query not unnaturally arises as to whether the workshop of the average ironmonger is as efficiently equipped as it ought to be in order that all ordinary repairs may be dealt with on the spot.

Many ironmongers, we are aware, possess excellent modern machine-tools and all the appliances they need, but we have reminiscences of other workshops in which the tools are certainly not within miles of what they ought to be. We are afraid, indeed, that many ironmongers' workshops are little better than very ordinary smithies, in which repairs are done only with an abnormal expenditure of time, by hand-work for the most part, and with far more delay than should take place. The workmen are often clever and patient, but they are just as frequently neither the one nor the other, and in either case it should be the business of the employer to provide certain machine and other tools, without which no repairing shop can be deemed up to the mark in these competitive days.

There is no need, we think, for us to specify the appliances which are necessary—indeed, these vary so much according to individual requirements that what would suit one shop would be out of place in another. At the same time, there are some appliances which are of use everywhere, and now that cycle repairs loom so largely there are others which should be found in all shops which have any claim to be what they ought to be. Gas and electricity nowadays furnish power and heat in such a handy manner that they may be used in both ways far more generally than they have been hitherto by members of the trade. A little reflection will show how this may best be done, and we hope that reflection will not be omitted by those who know that their shops are not now properly equipped.—Ironmonger, London.

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COAL HODS

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STOVE PIPES

ELBOWS, ETC.

WHERE IS THAT SCREW?

THE following story is told of an English peer with a taste for engineering.

It is clipped from a daily paper and is a very good yarn in its way, but requires an analysis, which is given later on. Having entered the engine room of a large manufactory, the engineer's attention was attracted by his odd behavior.

"Well, what's up now?" he growled at the peer. "What are you shaking your head and pulling out your watch for? What have you got to find fault with, anyhow?"

"Oh," came the answer, "it is all the same to me. I have got no fault to find. I am just waiting till the boiler explodes."

"The boiler explodes? Why, you are crazy, man," exclaimed the engineer, angrily, preparing to turn the peer out as a dangerous crank.

"Well," retorted the peer, "if you work ten minutes longer with that loose screw there the boiler will certainly explode."

The engineer, gazing in the direction indicated, paled, and jumped to the top of the engine.

"Why the devil didn't you say so sooner?" he blurted out.

"Why should I?" answered the peer.

"I never yet have had an opportunity of seeing a boiler explode."

Will the writer of the story kindly give the

location of that screw? asks an exchange.

Its place on the engine is not stated and the engineering editor can't tell for the life of him where to find it or even to see why its being loose should threaten the explosion of the boiler. He has studied about it during several waking nights and has finally arrived at the conclusion that the screw is intended as a metaphorical reference to the imaginary screw that is always getting loose, whether in machinery, or a man's or a woman's head. But, this doesn't explain why the engineer shut off the steam. That would only increase the pressure on the boiler and bring about the explosion for which our philosophic peer was waiting and the engineer wished to avoid. In fact, there seems to be a screw loose with the story, or in the engineer, or the peer, or even the engineering editor. Any way, the latter can't find it in any other place and is tempted to offer a substantial reward for its discovery. Will some obliging reader endeavor to locate it for him, and in the interest of mechanical humanity?

CREATING OPPORTUNITIES.

He is a wise man who is able to grasp opportunities, but he is a still wiser man who is able to create opportunities for extending his business.

Opportunities are created by someone or somehow, and just as manufacturers are able to make their own machines for turning

out certain articles, so business men should be able to turn out opportunities for increasing their trade.

When the farmer takes his plough into the field it is for the purpose of cultivating the soil that it in turn may cultivate wheat, or some other commodity.

Cultivating opportunities in business is really creating opportunities. The bright, energetic merchant, with his head ever evolving new ideas and his will-power ever putting them into operation, is really creating opportunities. He sows and he reaps. And a man usually reaps what he sows.

CANADA GOT THE CONTRACT.

The Mica Boiler Covering Co., Limited, Toronto, have just finished a noteworthy contract in Waterbury, Conn. They covered the smoke flues between the boiler and economisers in the plant of the Waterbury Manufacturing Co. with mica. This effected a rise of 90 degrees in the temperature of the flue gases entering the economisers and caused a saving of 5.75 per cent. in the total annual coal consumption of the factory.

This is a very gratifying result for Canadian made goods, as this is one of the "big" concerns of the States, and the Canadian goods have to be sold against a stiff duty and in competition with many American companies.



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MACHINERY AND MECHANICAL DEPARTMENT.

COMPARATIVE TEST OF ROLLER BEARINGS.

AN interesting test was recently made by the Union Railroad Co., Providence, R.I., to determine the saving in power, if any, by the use of roller bearings for car axles, as compared with the solid bearings ordinarily in use. The route traversed was approximately ten miles.

Car No. 7 was equipped with the diamond truck and Hyatt roller bearings, and car No. 9 with Menear truck and solid boxes. Both cars had been in constant operation for several months, the test being made without cleaning or special lubrication of any kind, the object being to make comparison in such a way as to determine the relative amount of power consumed in every day use.

Both trucks were made of G. E. 1,000 motors, approximately 30 horse-power, of the same type, the efficiency of each for this purpose being assumed the same under the same load. Each car was run the same distance, over the same route, at the same time of day and operated by the same motor man.

The instrument used was what is known as a Thompson recording wattmeter of high efficiency. The fixed coil of this instrument was placed in series with the motor, the movable coil in parallel, care being taken that the heat and light circuits were cut in on the trolley side of the instrument.

At one part of the route selected there is a down grade followed by a short up grade, the end of the line being some 60 feet from the top of the incline. A comparison of the freedom of running of the two trucks was made by stopping both cars at the top and allowing them to run freely without power. Car No. 7 would be able to not only run up the incline, but it was found necessary to set the brakes hard in order to stop the car at the end of the route, while with car No.

9 it was necessary to use power in order to complete the ascent.

The superiority of the diamond truck in regard to ease of riding and freedom from jar was marked; in fact, comparison showed it was impossible to attain nearly as high a rate of speed with No. 9 as with No. 7, the former having a tendency to leave the rails.

An attempt was made to determine the difference in power required to run the car up the incline before mentioned. Several observations were made and the average result may be found in the table. A comparison of the power necessary to round a curve was also desired, but it was found to be beyond the range of the instrument.

It will be seen from the table that the total numbers of stops differ by a small percentage, the comparison of the number of stops for each trip showing that the conditions were very close, this being considered important, as it was believed the energy required to start the car was considerably less in the case of No. 7.

The number of passengers carried differs by only 10 per cent., and the running times of the different trips were found to be almost the same.

The power consumed has been given in horse-power hours, as well as in watt hours. The saving has been reduced to a percentage of the total power used, as it is believed this is the most satisfactory for the purpose of calculating the saving for any size equipment; it has also been left in watt hours and watt hours per mile, as well as horse-power hours and horse-power hours per mile. It must be remembered that this is the actual saving on the road, the saving in the powerhouse being still greater by the decrease of loss of transmission from dynamo to motor. Observations were taken on several cars, and practically the same result found. It is believed that this is a fair comparison of what may be expected in everyday use. Below will be found the result:

	No. of Car.	
	7	9
Number of miles run	30	30
Number of passengers carried	281	254
Total number stops made.....	214	201
Factor of instrument	10	10
Difference in reading	2,629	3,024
Power consumed, watt hours.....	26,290	30,240
Average difference in reading between top and bottom of grade..	41	46
Difference power consumed, watt hours.	3,950	
Difference power consumed, horse-power hours		5.30
Percentage of difference		13.06
Difference per mile, watt hours ...		131.6
Difference per mile, horse-power hours. ....		.177
Amount saved, watt hours.....		50
Percentage difference.....		10.87

It will be thus seen that the saving in power by the use of the bearings in question was shown to be 13 per cent. of the whole power consumed. In ascending a grade, the result is shown to be 10.87, the friction on the journals being the same as on an average run, while the power necessary to raise the car being considerably greater, the percentage of saving would be correspondingly less.

Tests made at the Dorchester Avenue Station of the West End Railroad Co., of Boston, showed an average consumption of 3 pounds of coal per kilowatt hour. On the supposition that 200 cars are run 75 miles per day, the reduction in weight of coal used is 5,922 pounds per day, which, at \$3 per ton, amounts to \$3,242 per year.—American Machinist.

BELTS AND GEARS.

IN years gone by mechanics and mechanical engineers in general tenaciously adhered to the theory that gearing was preferable in all important respects to belting as a power-transmitting agency, writes R. J. A. in American Miller. One reason for this belief was that gearing had been longest in use, and all classes of mechanics having knowledge of machinery were much better acquainted with it than with belting. They preferred gearing to belting as much

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A FIRE INSPECTOR

reports that more policies covering mills, warehouses, etc., are cancelled by reason of lack of fire pails than by any other reason. And yet it costs so little to equip premises with indurated fibreware round bottom fire pails made by



The E. B. EDDY CO., Limited

HULL, MONTREAL and TORONTO.

by force of habit as for any other reason. It is true that when gear wheels are truly finished and have teeth and cogs perfectly formed in accordance with mechanical laws bearing upon the case they will run smoothly and noiselessly, especially while new and properly adjusted to each other. But look out when they begin to wear, and the shafts get out of line, as they are sure to do in flour mills. It can also be conceded that while gearing is new, in good condition, and the shafts in perfect centre and line, it will transmit power as economically as any other medium. But when the shafts are out of centre and out of line, gearing becomes extravagant in the use of power, and is therefore not a desirable medium in transmission.

Of course, this defect is not strictly chargeable to the gearing, but rather to the condition into which it gets when in operation. It is certain to get into bad running condition sooner or later and cause waste of power, attended with much noise and other disturbances. Consequently, I would not favor the use of a single pair of gear wheels in a flour mill unless such small wheels as may be attached to special machines. All of the machinery in a mill ought to run very smoothly. There should be no shake, jar or tremble. Therefore, heavy gear wheels should not be used.

On the other hand, the use of belting produces no bad effects, and can always be depended upon to do its work well if properly adapted to the work to be done. Owing to a lack of knowledge on the part of those who use belting, mistakes are sometimes made which cause more or less trouble. When a belt is given more work to do than it has capacity for doing it is but natural for it to make trouble by slipping, running off the pulleys, or otherwise balking and making mischief for those in attendance upon it, and the machinery being operated. When a belt has ample capacity for performing the work assigned to it no serious trouble will ever be experienced.

The per se working capacity of a belt is measured by its width and thickness, and, other conditions equal, the working capacity of belts is theoretically in exact ratio to width and thickness. Thus a belt 8 inches wide possesses twice the working capacity of one 4 inches wide, both being of the same thickness. Transmitting belts are made of various materials, and of materials differently combined and arranged. Therefore there is a difference in their transmitting capacity. Some kinds of belts have more strength and transmitting capacity than others of the same width and thickness. But as leather belts are in more general use for all purposes than any other kind, their transmit-

ting capacity is usually taken as a fair average for all.

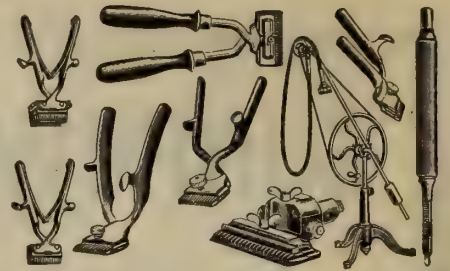
But while it is true that the inherent transmitting strength of a belt is measured by the belt's width and thickness, it is also affected by the velocity at which it travels when at work. Thus the actual working capacity of a belt is finally measured by the combined influences of width, thickness and its moving velocity when at work; and just as the inherent strength or transmitting capacity is in exact ratio to the width and thickness of the belt, all conditions being equal, so is the theoretical velocity capacity in exact ratio to the rate of velocity. This makes a very simple combination that ought to be readily understood by all, and the knowledge can be easily applied in practice. To make it clear, a belt of given width, with a velocity of 2,000 feet per minute, will transmit twice the power of a similar belt traveling 1,000 feet per minute. A belt 8 inches wide, with a working velocity of 2,000 feet per minute, will transmit four times the power of a belt 6 inches wide and 1,000 feet velocity, provided the thickness of the belts and all other conditions are equal. The size of the pulleys exerts no influence in the transmitting strength of belts except as they may vary the velocity of the belts. When pulleys are made smaller, the speed of the shaft remaining the same, the velocity of the belt is lessened, and its working capacity reduced. With larger pulleys the velocity of the belt is increased, and its working capacity increased. A constant tendency of the belt to slip can be remedied by increasing the size of the pulleys, and thereby the velocity of the belt.

ILL WITH TYPHOID FEVER.

Mr. L. N. Vanstone, one of H. S. Howland, Sons & Co.'s travelers, is confined to his home in Bowmanville with an attack of typhoid fever. According to the latest report his condition was considered serious. His place on the road is being temporarily filled by Mr. E. B. Fielding, who has for some time been city traveler for H. S. Howland, Sons & Co., and is therefore thoroughly in touch with the firm's business. It is to be hoped Mr. Vanstone will have a speedy recovery.

BICYCLES FOR AUSTRALIA.

The Massey-Harris Co., Ltd., Toronto, have just shipped 800 wheels to Australia, making a total shipment this season of 3,300 wheels. They are making a great effort to catch the Australian trade, where the busy season is on at the dulllest time here. They intend, also, to send a large shipment to Paris, France, including the electric show wheel which has attracted so much attention in their Toronto show-room window.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **THE COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

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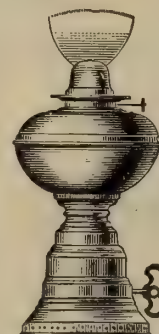
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ONTARIO BUREAU OF MINES REPORT.

THE sixth report of the Ontario Bureau of Mines was issued on Tuesday. It deals only with the operations for 1896 and contains more than 300 pages of information intrinsically valuable.

The directors' report says:—Compared with the transactions in mineral lands in 1894 there was an increase last year in the number of locations sold and leased of 218, in the area of land sold and leased of 13,635 acres, and in the receipts from sales and rentals of \$22,644. The total collection on account of lands sold and leased last year was \$35,581 (not including \$5,006 of rent money paid on lands previously leased), and during the last few weeks of the year there was paid in a further sum on lands applied for of \$28,436. The largest receipts were in the months of November and December, and as evidence of the continued briskness of operations it may be stated that the receipts on account of mining lands in the first three months of the present year, exclusive of a special deposit of \$20,000, have been \$72,387.

Among the papers which constitute this report are: Dr. A. P. Coleman's third report on the west Ontario gold regions; notes on the milling of gold ores, by John E. Hardman, of Montreal; the story of Silver Islet, by Mr. Blue; notes on moss litter, by Thomas W. Gibson, secretary of the Bureau; explorations on the boundary between Nipissing and Algoma, by E. M. Burwash, B.A., of Victoria College; a descriptive catalogue of mineral collections for the summer mining schools, by Prof. Goodwin and his associates of the Kingston School of Mining; and the seventh annual report of the inspector of mines, Mr. Aaron Slaght, of Waterford.

A table has been prepared showing the value of mineral production and the number of hands and wages paid during the year. Extracts from the table are of interest:—

	Value.	Wages.
Gold	\$ 121,848	\$ 91,210
Nickel	357,000	247,151
Copper	130,660	
Iron	353,788	47,000
Building stone	394,000	273,000
Petroleum	1,955,295	190,740
Tile and brick	721,000	306,000
Natural gas	276,710	47,527

Mr. Blue's story of Silver Islet will be read with interest and profit. His summary of the situation evolved there is particularly instructive.

If there is a moral or a practical lesson in the story of Silver Islet it should have value for all time. I will just recall a few facts, the knowledge of which may be useful to men who are prompted to put money into mining enterprises. The properties pur-

chased from the Montreal Mining Co. by the Sibley syndicate consisted of eighteen locations, embracing over 100,000 acres of mineral lands. The selling price to the syndicate was \$225,000, and in less than three years one of the eighteen locations was sold for \$150,000, and little Silver Islet produced enough silver to pay off the whole purchase price, two dividends aggregating \$262,666, and nearly \$500,000 besides for development and improvement of the property. Then a company within a company was organized, capitalized at \$6,000,000, and in the first two years of its existence the shareholders were paid two dividends of \$180,000 each, or a total of \$360,000, and every dollar of the stock was fictitious. How much more was paid in dividends, if any, I do not know, for some of the annual reports cannot be found. Then the company with \$6,000,000 stock was wiped out and one of \$1,000,000 formed in its stead, but into which not a dollar of money was put as far as I can make out; only it shouldered a mortgage of \$400,000, left as a legacy by the old company, which covered Silver Islet and 100,000 acres of mineral lands besides. Then came one year of plenty, which yielded about three-quarters of a million dollars, followed by seven years of famine, and finally the sale of the mine and all the lands under foreclosure of a mortgage. The mine had yielded in all, from first to last, \$3,500,000, and this was the end of it. Thomas Macfarlane, in 1879, had uttered a note of warning against the practice of picking the eyes out of a mine. "The product of a mine, like that of a farm," he said, "cannot be forced beyond certain proper limits without bad consequences.

Let reserves accumulate in mines as the 'rests' formerly did in our financial institutions, and mining will become as profitable as banking, if not more so." In European countries mines are worked on a plan to secure continuity of operations and permanency of the mining industry. In the new world, as has well been observed by the first director of the United States Geological Survey, Mr. Clarence King, the effort often is to get out the largest amount of bullion in the shortest time possible. "The number of precious-metal mines in this country," he wrote in 1885, "which have continued to be productive during a period of ten years is very limited, and the life of many of the most famous and successful ones has been far shorter. Indeed, a bonanza which has required two or three years to exhaust is a rarity. The practical lesson may be found, I think, in these facts; and if you are putting money into silver mines or gold mines, or mines of any sort, pray don't try to become million-

aires in a year, or two or three. Leave something in the earth for the generations coming after us, for the earth and its people must live on."

A NEW PROCESS OF GALVANIZING

AT a meeting of the Franklin Institute recently a paper was read by Mr. George C. Reese describing a new process of galvanizing wire. Enormous quantities of steel and iron wire are required to be "galvanized" or plated with zinc, and the long-established process has been to unwind the wire from one coil and wind it upon another, passing it in the meantime through baths or other means of chemically cleaning the wire, then through a long trough containing a large quantity of melted zinc kept constantly hot, and between wipers of asbestos or other material.

The process has always been a slow and tedious and expensive one, the objectionable features of which it is not necessary to enumerate. By the new process the wire is coated more satisfactorily than before and without the necessity of even unwinding the coils. The coils or bundles of wire are first cleansed by acid. The whole bundle is then dipped into the bath of melted spelter, and when it has received a thorough coating it is quickly dropped into the basket of a centrifugal machine. For small or light coils the machine may be already in motion, while for heavier wire it must be started after the wire is put in. The surplus coating is almost instantly thrown off from the wire, and an excessive speed is not required. The machine is stopped and the bundle of wire is removed as quickly as possible and is jarred upon a block to prevent the wires from soldering together. Barbed wire has been successfully treated by the new process after it has been twisted into shape and formed into bundles. When wire is galvanized before being barbed and twisted much of the coating cracks and peels off and the points quickly rust. Treated by the new process, the wire is more durable and retains its efficiency much longer. Wire cloth finer than eight meshes to the inch cannot be galvanized by the old method, while by the new process cloth of any fineness may be coated, if the speed of rotation is increased according to the fineness. Samples were shown of 12 x 13 fly wire 16 mesh, believed to be the first of the kind ever successfully galvanized after weaving.

HAVE A WIRE-DRAWING PLANT.

The Waterous Wire Nail Works Co., of Brantford, have put in a wire-drawing plant in connection with their factory, and are now making their own wire. It is their purpose to shortly manufacture fencing wire.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Oct. 29, 1897.

HARDWARE.

THE week has witnessed quite a good volume of business, and as the fall advances and the close of water navigation draws near the volume of orders for goods of all kinds for delivery before this takes place steadily increases. There have been no important changes in small goods this week, but a rise in wire nails is confidently predicted in the near future from causes which are referred to elsewhere. Demand for them also is quite active, and buyers are experiencing difficulty in having their orders filled as promptly as they wish. Cut nails, while not so active as their twin line, are fairly enquired for and rule steady. The same can be said of all other lines of hardware and shelf goods, in which a good week's business has been transacted.

BARBED WIRE—Continues dull, but prices have a firmer tendency, and jobbers this week are asking higher prices in some cases, and we quote \$2.30 to \$2.35.

PLAIN WIRE—There has been little

change in this line, demand ruling quiet, while discounts are unchanged at 30 and 10 off.

WIRE NAILS—The possibility of an advance is generally discussed this week and naturally the demand has increased. Neither makers nor jobbers, however, will book ahead to any extent for fear of being caught by an advance with low priced contracts on hand. We quote values firm at \$1.85 to \$1.90 f.o.b. Montreal.

CUT NAILS—Demand for cut nails is not so active, but, with advances in iron, higher prices are also looked for in these. We quote \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Trade in these is of a moderate character and discounts are unchanged at 50 per cent.

HORSESHOES—There is a fair enquiry for horsehoes. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new

light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Trade is well maintained in these. Discounts are as follows: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Continues unchanged with discounts 12½ per cent.

BOLTS—There is a moderate trade doing. Discounts are as follows: Carriage bolts, ¼ and 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—Orders coming in continue of fair dimensions. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—There is a good enquiry for all kinds of draining tools. Discounts are as before.

YUKON...

TRIPLE HEATER

The most complete and effective heater made in the Dominion. Takes 30-inch wood.

Size of fire door opening 11 x 14¼ in. Shipping weight 460 lbs. Large hearth. 4-piece sectional linings that can be replaced through front door. Direct or indirect draft. Fire travels the entire length of stove three times before entering smoke pipe. Flues easily cleaned from front. Two very effective hot air flues that will distribute heat equally; one cannot rob the other. Strong leg base and nicked rails packed inside of stove for shipping.

List Price - \$33.68

Order a sample early

If you want your goods quick, order from us

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver



Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

Razors
Pen Knives

H. BOKER & CO.



For Sale by

WOOD, VALLANCE & CO.
HAMILTON.

FILES — As last reported. We quote : 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There is a fair enquiry for cordage at the advance. We quote : Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—There is a fair enquiry for these and Royal Canadian are selling best at \$29.

BUILDING PAPER—There is an active demand for building paper. We quote : Plain building, 25c., tarred lining, 35c., and roofing, \$1.30 to \$1.40.

HOLLOW WARE—There is a fair trade maintained in tin, tinned and enamelled iron and plain iron ware.

HINGES—Continue as last reported. We quote : Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—The enquiry for cutlery continues active both for table and pocket discriptions.

SPORTING GOODS—There is a fair enquiry for rifles and their ammunition at the moment.

SHOT — Rather quiet but values firmly held. We quote : Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent. trade discount.

CEMENT—Continues active and firm, and buyers experience great difficulty in having their orders attended to promptly, as supplies at hand are light. English sold firm at \$2.10 to \$2.20, ex wharf, and Belgian \$1.85 to \$1.90.

FIREBRICKS—In good enquiry at \$16 to \$21 per 1,000, as to brand.

METALS.

The only change in heavy iron and metal values during the past week was an advance of 5c. in the price of bar iron. This has been long anticipated. Trade is quite active and the general feeling firm for all lines.

PIG IRON — There has been a good enquiry for pig, and several round lots of both Summerlee and domestic brands have sold at our inside quotations. For smaller lots the outside price is strictly adhered to. We quote : No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—The makers advanced their prices 5c. per 100 lbs. last week and jobbers have followed suit with a similar rise, and we quote \$1.45 to \$1.55 in a jobbing way.

BAND IRON—In line with bar, the price of this also is firmer at \$1.75.

Cattle Ties

Do not purchase before seeing our samples and prices. Our Ties are the lightest, strongest and best, and most satisfactory line to handle.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

— MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

HOOP IRON—There is a good enquiry for these, but prices are unchanged at \$2.25 to \$2.35.

SHEET STEEL—There is a good brisk jobbing trade passing. Prices are steady on the basis of \$2.35.

GALVANIZED IRON—Orders for these are numerous and a feature is their increased volume from the west for British goods in preference to United States makes. Values range unchanged at \$4 to \$4.15.

TINNED IRON—Continues the same at 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges, the usual extras.

LEAD PIPE—Orders are small, but pretty numerous. We quote lead pipe 7c. per lb. and composition and waste pipe 7½c., subject to a discount of 27½ per cent.

PIG LEAD—There is a fair trade passing and importers who tried this week to secure a concession in values could not do so. Prices therefore are firmly held at \$3.85.

INGOT TIN—Moving well in a jobbing way at 16c.

INGOT COPPER—There is a moderate demand for jobbing lots at 12 to 12½c. per lb.

SHEET COPPER—There is a good enquiry. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There is a good enquiry for these and values have a firmer tendency, for we hear that bids of \$2.10 were refused this week. We still quote \$2.10 to \$2.25, according to grade and quantity.

TIN PLATES—There is a steady trade doing in these, but we hear that some sellers have shaded \$3 in the case of I. C. cokes, and we alter our quotations in accordance. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.80.

TERNE PLATES—There is a good seasonable enquiry for these on the basis of \$6.

COIL CHAIN—In fair demand, especially logging chains. We quote the basis \$2.85 for ⅝ up.

SHEET ZINC—Prices are firm with a good demand at 5 to 5½c.

SOLDER—Very little doing, and we quote 11½c.

SPELTER—Quiet and steady at 4¾c.

ANTIMONY—Unchanged, at 9½ to 10c.

IRON PIPE—Demand has been good since the advance, but there has been no further change. We quote: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1¼-inch, \$5.35; 1½-inch, \$6.90; 2-inch, \$9.35; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—Makers are keen buyers of scrap when the price is not too stiff. The trouble is that holders incline that way. Prices are \$14 to \$15, as to quantity.

GLASS.

There is a good demand for window glass, and values point still higher owing to light stock and the scarcity of some of the more staple sizes. Importers have in consequence advanced prices in some cases 10c. to \$1.40 for first break, but this advance has not been generally established yet. We quote: First break, \$1.35 in 50 foot boxes, and \$2.60 in 100 foot boxes.

PAINTS AND OILS.

There is a steady enquiry in all departments of this business. A noticeable feature is the demand from manufacturing firms for paints and varnishes for implements, utensils, furniture, and other manufacturing purposes, as well as for railway supplies. Prices generally remain steady.

White lead still forms a prominent feature in the demand, and colored paints of all kinds in paste and ready mixed are called for. Linseed oil is steadier in view of the close of navigation, stocks not being heavy, and some firmness in price is looked for. Turpentine is quiet and without change, but advances in the near future are predicted. Castor oil is weaker, while demand for seal oil from Quebec buyers has been fair, and some round lots of brown were placed during the week at 30c., and straw at 37½ to 38c. The stock of the latter is very small on spot now. A round lot of Gaspe cod oil sold at 28c.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¼c.; kegs, 4½c.

PUTTY—We quote firm with prospect of advance; bulk, \$1.50; bladder in bbls. \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Steadier; Raw, 43c. boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—We quote: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

Continues firm with increasing demand. We quote: Canadian, 14½c. in car lots and 15½c. in smaller quantities; American, 16½c. in car lots and 17½c. for small lots.

COAL.

There is no change in coal. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

MONTREAL NOTES.

Makers' agents here report large orders for galvanized iron for importation before the close of navigation.

Makers have advanced their prices on bar iron 5c. per 100 lbs. and the jobbers of course have followed suit.

Some importers are asking an advance of 10c. on window glass but no advance has generally been established yet.

ONTARIO MARKETS.

TORONTO, Oct. 29, 1897.

HARDWARE.

NO particularly new features have developed during the week. Business has on the whole been fairly well maintained, and the outlook is promising. The week has been uneventful as far as any change in prices is concerned. Business has improved a little in ordinary fence wire, but other kinds of wire are as a rule still quiet. Trade in wire nails is active, and the feeling in regard to price firm. Business is good in both horse nails and horseshoes. Some good orders for both tinware and enamel ware are reported. In building paper there is some difficulty in getting supplies. Sporting goods continue in good demand.

BARB WIRE, ETC.—Dull. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE—Trade has been rather better this week in ordinary fence wire, some fair orders having been received for oiled and annealed and galvanized. In hay-baling wire trade is about the same as last week. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE—Business is in much the same condition as a week ago. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—The demand has further increased during the week, and while prices are, on the whole, firm and likely to go higher, there has been a little irregularity in quotations at some of the outside points. We quote as follows: \$1.85 Toronto. Prices at other points are based upon Montreal figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

The "Empire" Patent Galvanized Tinned Steel Shingles



These Shingles are made from Charcoal Tin Plates formed into shape **first** and galvanized **afterwards**.

Beware of imitations that are cut out of large sheets of galvanized iron **and then stamped**. Such goods will not make a durable roof, as the coating cracks, and peels off at the locks; and, besides, the cut edges are not coated.

The "Empire" Patent Shingles are made only by us, and are coated all over—not in spots only. They are positively the only shingles that are properly made and thoroughly galvanized.

Of course, they cost a little more than the imitation. But—

METALLIC ROOFING CO. Limited

TORONTO

THE PIONEERS IN THE METALLIC ROOFING, SIDING, CEILING AND LATHING INDUSTRY.

CUT NAILS—The demand is not brisk. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Business has been active, and a scarcity in "C" brand is to be noted. Discount, 50 per cent.

HORSESHOES—Quite a number of orders have gone through this week at the ruling figure of \$3.25 f.o.b. Montreal.

SCREWS—Business is fair. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS—Trade is brisk. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts,

square, 4¾ c., off the list; hexagon, 5¼ c., off the list.

RIVETS AND BURRS—Business is moderate. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—There is little doing outside plough line rope, cotton rope, and sash cord. We quote: Sisal, 7-16 in. and larger, 6¼ c.; ¾ in., 6¼ c.; ¼ and 5-16 in., 7¼ c.; 3-16 in., 7¼ c. Manilla, 7-16 in. and larger, 7¼ c.; ¾ in., 7¼ c.; ¼ and 5-16 in., 8¼ c.; 3-16 in., 8¼ c.; deep sea line, 13½ c. for water laid, and 14½ c. for machine-made; hemp, 7 to 9c.

CHURNS—While a slight improvement is to be noted, orders are still small. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days

CLOTHES WRINGERS—Are moving slowly. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS, ETC.—The demand is still being maintained, especially

for draining tools. Discount, 45 and 2½ per cent.

HARVEST TOOLS—There is hardly anything doing except in hay knives.

BUILDING PAPER—Owing to one of the large factories having been burned out, some difficulty is being experienced in getting supplies. We quote as follows: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Trade is fair. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—Some good orders for both tinware and enamel ware have been received during the week.

CUTLERY—A good trade is still being done.

SPORTING GOODS—Trade is still active and a scarcity is being experienced in some lines of rifles.

HINGES—Business much as before. We quote as follows: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CEMENT—The supply is quite short, expected shipments not having arrived. Cal-

cined plaster has advanced 10c. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.35; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$2.20 per barrel.

METALS.

Trade has been fairly satisfactory during the week, especially in galvanized iron, black sheets, Canada plates and tin plates.

PIG IRON—As will be noticed in our editorial columns, the Government is prohibiting the importation into Canada of convict-made southern pig iron. Business is much the same as a week ago. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—There has been a noticeable increase in the demand during the week, some nice assorting orders having been received, although the quantities wanted are not, as a rule, large. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—The movement has been fairly good. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—Trade has been good in both Nos. 1 and 2 qualities. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24 \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

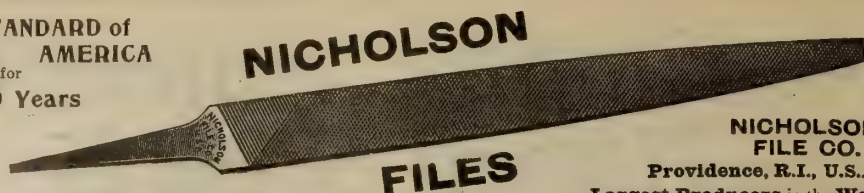
BLACK IRON—A nice business is also being done in this line, shipments from stock during the past week having been numerous. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—While stocks are in somewhat better condition, there is still a scarcity of eight-foot sheets. Business continues active. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{3}{8}$ c.; 18 to 24, \$3.87 $\frac{1}{2}$ c.; 26, $4\frac{1}{8}$ c.; W. G. 28 gauge, \$4.37 $\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Business is fair. We quote: $3\frac{3}{8}$ and larger, \$1.75 per 100 lbs.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{3}{8}$ to $7\frac{3}{8}$ c. per lb.

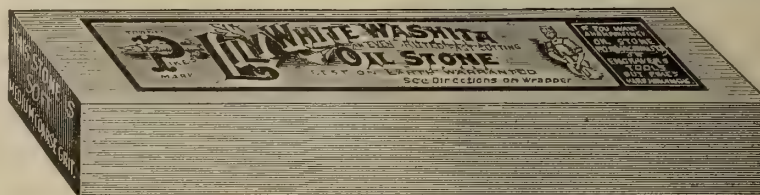
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Largest Producers in the World

Pike's Lily White Washita Oil Stone

The Only Perfect
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THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the 38-40 and 44-40 cartridges, but also the 25-20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

LEAD PIPE AND TRAPS—While the orders are coming in somewhat more freely, they are still small. We quote as follows: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, 27 $\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Has been moving fairly well at firm prices. We quote pig lead at 4 to $4\frac{1}{8}$ c., and bar, at $4\frac{1}{2}$ c.

SHOT—Trade is fair. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, 12 $\frac{1}{2}$ per cent.

INGOT TIN—Is in good demand. Straits' was rather scarce in the early part of the week, but stocks are now complete. We quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb.

INGOT COPPER—Is moving slowly. We quote 12 to $12\frac{1}{2}$ c. per lb.

SHEATHING COPPER, ETC.—The movement in sheathing copper has been rather better. Braziers' is also being called for more freely. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—The demand during the past week has been better than for some time. particularly in the smaller sizes. The price of galvanized pipe has been advanced. We quote: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$1.87; $\frac{1}{2}$

inch, \$2.35; $\frac{3}{4}$ inch, \$2.87; 1 inch, \$3.87; $1\frac{1}{4}$ inch, \$5.10; $1\frac{1}{2}$ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, $\frac{1}{2}$ inch, \$4 to \$4.25; $\frac{3}{4}$ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; $1\frac{1}{4}$ inch, \$9.25 to \$9.62 $\frac{1}{4}$; $1\frac{1}{2}$ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—The demand is fair. Discount, 60 and 10 per cent.

RANGE BOILERS—Demand is good. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—There has been no falling off in trade during the past week. The shipment of all-bright alluded to last week has arrived and is going out freely. We quote: Half-polished, 52-sheet boxes, \$2.25 to \$2.30; ditto, 60-sheet boxes, \$2.35; ditto, 75-sheet boxes, \$2.45; all-bright, \$2.90 per box.

TIN PLATES—Trade has been exceptionally good, principally in the larger sizes chiefly used for furnace work. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade is quiet. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SHEET LEAD—Trade is fair. We quote: 5½c. per lb.

COIL CHAIN—Business continues fair. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—There has been a scarcity of the standard sizes owing to the strong demand. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Has been moving freely this week. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—There is not much doing. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

Business is brisk. The demand has increased greatly, while some dealers are short in their supplies. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

A steady flow of good business has been experienced during the past week, making it imperative on the part of some manufacturers to augment their staff and put forth every effort to "clear the slate" before the winter rates of freight are put into force.

While the shipment of house painters' materials shows no diminution there is a marked increase in the output of varnishes and colors used by large corporations and manufacturers. The white lead trade is exceedingly good, and while there is a strong feeling that quotations should be advanced, they are still unchanged. The best grades of dry white lead, known as "Dutch process," are held at \$4.75 per 100 lbs., in casks. Other brands, not so favorably known, are shaded 15 to 25c. per 100 lbs. Red lead is firm without material change. Putty, owing to brisk trade, is in short supply and likely to be higher in price. Household paints and enamels are unchanged, and without special feature. Turpentine and linseed oil are in active demand. Turpentine has been reduced 1c. per gallon.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per

100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 26c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.



Brooklyn Oil Heaters

Will heat a room
15 ft. square for
1c. per hour.

Just the thing for
a bedroom or bath-
room where you
cannot put a stove.
Absolutely safe.

**NO SMOKE
NO ODOR**

Very light and
handy to carry
around.

**Nickel Plated
Brass Tank**

THE D. MOORE CO., LIMITED, HAMILTON

Write for Booklet and Prices.

Hardware Stock for Sale

A first-class Hardware Stock, including Bar Iron, Paints and Oils, with business in full swing, for sale at a rate on the \$ on invoice prices. For particulars apply to DINGWALL & ROSS, Port Hope, or to ROBERTSON & MacLENNAN, Barristers, Canada Life Building, Toronto.

OLD MATERIAL.

The market is in good condition. The supply is good in all lines except cast iron which is quite scarce. Prices are unchanged. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

COAL.

The lack of cars is still inconveniencing dealers, causing a shortage in their "rail yards." The majority had, however, a large stock on hand before the shortage of cars affected them, and, as large quantities are continually arriving by boat, all demands are being met. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46, net tons.

HIDES, SKINS AND WOOL.

HIDES—Market is still steady. We quote: Cowhides—Dealers pay 8½c. for No. 1, 7¾c. for No. 2, and 6½c. for No. 3. Steerhides—60 lbs. and up, 8½c. for No. 1, 7½c. for No. 2 and 6½c. for No. 3.

CALFSKINS—The market is nominal, few or none offering. We quote: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 75 to 90c.

WOOL—Fleece wool is still dull. Pulled wools are fairly active. We quote super pulled wools at 21 to 22c.; extra at 22 to 23c.

PETROLEUM, ETC.

Business is brisk, a good all-round demand being experienced. Prices remain unchanged. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

Galvanized iron pipe is dearer.

Calcined plaster has risen 10c. per barrel in price.

Turpentine has been reduced 1c. per gallon, being now quoted at 48c. Toronto, and 50c. at outside points.

The Gurney Foundry Co., Limited, is extremely busy in boilers and radiators. The company this week shipped three carloads of radiators to London, England,

where they are to be used in the Grove Hospital in that city.

The Toronto Steel Clad Bath and Metal Co., Toronto, are purposing putting some new articles on the market in the near future.

Bertram, Wilson & Co. are experiencing a good demand for mining supplies. There has been a particularly good demand for blasting powder.

The Booth Copper Co., Toronto, report the fall trade in tea and coffee urns to be picking up. This year the prospects are much better than usual.

The Rational Bicycle Saddle Co., of Toronto, Limited, had last week in their window a wheel geared to 160. The wheel has frequently been ridden about the city.

R. Simpson & Co., selling agents for the Gendron bicycles in Toronto and Hamilton, are enlarging their Yonge street store in Toronto, and have removed from their old stand on King street to a larger one on James street north, Hamilton.

An auction sale of bicycles was held on Saturday last by S. M. Clapp, a bicycle liveryman, of Toronto. About 80 wheels were sold. The prices realized for the first wheels offered were good, but as wheels were sold the bidding became less active, and poor figures were realized.

UNITED STATES MARKETS.

NEW YORK, Oct. 27, 1897.

PIG TIN—Values averaged slightly lower, chiefly in sympathy with weaker London cables and demand. Five ton lots were easily obtained at 13.80 to 13.85c. f.o.b., and there were indications that 13.75c. cash would have been accepted in a few instances.

COPPER—The market was rather weak, with only moderate business and the demand slow. Prices are at about 11 to 11½c. for Lake Superior ingot, 10¾ to 10¾c. for electrolytic, and 10½ to 10¾c. for casting stock.

PIG LEAD—Operations are still on a very moderate scale, and the tone of the market continues weak, with 3.90c. about the top for common domestic. London cables were steady, quoting £13 10s. for soft Spanish.

SPELTER—There is no life to the demand and prices are barely steady at 4.20 to 4.25c. for ordinary western. London cable was £17 16s. 3d. for g.m. b.

ANTIMONY—The market is quiet but steady, with prices ranging from 7 to 7½c. for the ordinary up to 8 to 8¼c. for best brands.

TIN PLATE—The market remains quiet, and there is no change of importance in prices to note. The undercurrent, however, is still weak, particularly for American cokes.

IRON AND STEEL—Business in all departments is rather slow, and there is no improvement in values.

ONLY A SIXTY-DAY GUARANTEE.

WITH a sixty-day guarantee next year, it means that the dealer must be more careful than ever of the bicycles he buys and sells if he wishes to hold his trade. It means that the rider must exercise more care in the selection of his mount if he desires to avoid large expense over the original cost of his wheel.

The strength of a bicycle is dependent mainly on the tubing used. Dealers and riders alike should demand from the manufacturers who charge a high-grade price for their bicycles a certificate that they are made of 50 per cent. carbon steel tubing.

A dealer may forget about the guarantee when making his contracts for next year, but the cycling public won't when they come to buy. They are going to buy bicycles made of material that is a guarantee in itself.

THE KNAPP ROLLER BOAT.

The Knapp roller boat was given a second trial in Toronto Bay on Wednesday afternoon, when sixteen flanges were used, twenty feet long by nine inches deep, instead of eight flanges, as used before. The speed of the boat has been increased, but not materially, as the engine and track rails have not been sufficiently protected from the water. Arrangements are to be made to protect the boat from the water, when another trial will be made. He says that he will be satisfied with a speed of ten miles an hour with the present boat.

Mr. Knapp intends to build another boat 250 feet long and 50 feet in diameter, when he will place the engine in the centre of the boat instead of in its present position. He is confident of ultimate success, in an interview the other day stating that he would take the new boat down to the Atlantic, and give it an ocean trial. He also stated that he expects to revolutionize the carrying trade to such an extent that ports will have to be made on both sides of the Atlantic to accommodate boats of the new class.

EDISON'S WONDERFUL INVENTION.

Thomas A. Edison, the electrical inventor, has discovered a means of recovering by electrical process the iron contained in low grade ores, a discovery which will have world-wide effect on the iron industry. The process consists in blasting the ore and then by means of steam shovels and miniature railroad cars, convey it to massive crushers, where it is broken up and passed on to other mills, where it is pulverized. The powder is then allowed to fall in close proximity to electro magnets which deflect the iron to one side and the non-metallic matter falls to the other side, by gravity. From the time the ore is blasted until it is resolved into this metallic form and compressed into briquettes for shipment the process is entirely automatic.

A test, entirely satisfactory, was made a few days ago.

ON STARTING IN BUSINESS.

THE assistant who, by dint of hard work and perseverance, has managed to "save a bit of money," and is determined to start in business "for himself," is confronted by a good many doubts and difficulties. If he is able to buy an established business after proper investigation, his doubts and difficulties are mostly concentrated upon the realization of the figures which have been given to him in respect of the returns and profits of his predecessor, but if he decides to commence an entirely new undertaking there are many difficulties to be overcome.

In the first place he has to choose a locality. He must weigh up the chances for and against any given place, ascertain as nearly as possible how the existing ironmongers are "getting on," and decide whether there is any one line, or more than one line, in which he may have a fair chance of doing well. Then there is the vital point of "ways and means," which arises upon the questions of rent, rates and taxes, refitting the shop, fixtures, and the first outlay for a suitable stock. The rent must be moderate, viewed in relation to the general possibilities of the neighborhood. It may be cheap at £100 a year, or dear at £50 a year, everything depending upon the situation of the shop and the locality. But the great thing to be decided is the stock. Shall it be a good general assortment, or mainly a few special lines? Shall attention be devoted principally to furnishing-goods, to black ironmongery, to builders' lines, to tools, or to cutlery? The answers to these queries must be found by a careful study of the windows of the other local ironmongers, and by careful consideration of the probable wants of the residents round about.

It may pay best to run on the lines which the other ironmongers have found most suitable, or it may be wise to take up two or three special lines, keep a full variety in them, and push them "for all they are worth." If there is no near competition, then the odds would be in favor of a nice general stock, furnishing, tools, or builders' lines being given the preference according to the class of customers living in the locality. In a neighborhood chiefly inhabited by working people tools may be the best investment, due regard being paid to the trades in which the men are mostly engaged. Inquiries made in reliable quarters will speedily reveal how the men are employed, as well as where they are in the habit of buying their tools. In a good residential neighborhood furnishing lines may be the best stock, but if so the new-comer will need to be exceedingly up to date, and to pay special attention to novelties, so as to attract custom and get ahead of his neighbors.

In many of the manufacturing districts the bearings and wants of the standard local trades must be well thought out, so that in a colliery district the wants of the miners, in a textile district the wants of the weavers, spinners, etc., or in an agricultural district the needs of the farmers and laborers may all be duly met. Having considered these and other points, and the shop being stocked, the new-comer should certainly make it his business to become acquainted with any other ironmongers in his vicinity. It is quite possible that some of these may not like his advent, and may even openly resent his starting; but they have no exclusive preserve, and if they are wise will maintain a friendly attitude towards the latest arrival. Enmity may be bad for all, whereas friendliness and a little quiet chat may be the means of demonstrating that there is plenty of room for all of them. The new-comer will probably be wise to specialise one or two departments which have not been previously specialized by his local rivals, as by so doing he will not only hurt them least, but will have less competition to meet himself. —Ironmonger.

NUMBER OF FEET OF RADIATING SURFACE TO HEAT A HOUSE.

BALDWIN'S rule in order to find the number of feet of radiating surface necessary to heat a house is as follows:

Rule—Divide the difference in temperature between that at which the room is to be kept and the coldest outside atmosphere, by the difference between the temperature of the steam pipes and that at which you wish to keep the room and the product will be the square feet, or fraction thereof, of plate or pipe surface to each square foot of glass or its equivalent in wall surface.

To Apply the Rule—Suppose we have a room with 50 square feet of glass and 260 square feet of exposed wall surface, and we desire to heat this room to 70 degrees F. with low pressure steam by direct radiation, when the atmosphere is 10 degrees below zero. We would reason it out as follows:

Temperature of room, 70 degrees; less temperature of outer atmosphere—10 degrees; difference equals 80 degrees. Again—temperature of steam pipe, 212 degrees; less temperature of room, 70 degrees; difference, 142 degrees. Thus, 80-142 equals .56 of a square foot of heating surface to each square foot of glass, or its equivalent in wall surface.

Now, the equivalent will depend a good deal upon the kind of wall and how it is built. For a wall of ordinary construction and thoroughly well built, the ratio usually employed is 10 to 1. So in our case 260-10 equals 26 square feet of glass equi-

valent. This added to the true glass surface makes 26 plus 50 equals 76 square feet of glass to act as a cooling medium.

But for each square foot of glass we allow .56 square foot of radiation; therefore, 76 multiplied by .56 equals 42.56 square feet of radiation required.

Now, this is only figured against the glass surface, and it is enough to compensate for the cooling effect of that body. But we have got other things to consider and make allowance for, such as excessive exposure to winds, leaks around doors and windows, etc., etc., and this is where the heating engineer has to use his best judgment.

These conditions, which exist to a greater or less degree in all buildings, sometimes require that the radiation be increased even 50 per cent. This simple rule applies to all the different systems you speak of, except indirect heating.

If you wish to find the amount of indirect surface required, simply add 50 per cent. to the total amount of direct radiation required for the same room. If you want to find the amount of direct-indirect radiation necessary to heat a given room, add 25 per cent. to the total amount of direct radiation required for the same room.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A MEETING of the creditors of Drouin & Trudel, general merchants, Abénakis, Que., will be held on the 30th inst. to appoint a curator.

W. R. Crepeault & Co., general merchants, Kamouraska, Que., have assigned.

G. Gagnon, general merchant, Thurso, Que., has compromised at 50c. on the dollar.

H. J. Wilson, stove dealer and tinsmith, Niagara, Ont., has assigned to George P. Buck.

A. A. Hunter, general merchant, Brome, Que., has compromised at 25c. on the dollar cash.

Wintemute & Co., general merchants, Cayuga, Ont., have assigned to F. W. Wintemute.

Edward Murphy, carriage builder, St. John, N.B., is offering to compromise at 20c. on the dollar.

Pilon & Freres, general merchants, Alexandria, Ont., have compromised at 65c. on the dollar.

A. Livingstone & Co., general merchants, Yorkton, N.W.T., have assigned to S. A. D. Bertrand.

Gaspard Bernier, general merchant, Beauport, Que., has assigned, and his assets will be sold on the 29th inst.

A meeting has been appointed, to be held on the 9th prox., to appoint a curator for Francois Henley, general merchant, St. Anne Des Monts, Que.

Thomas J. Nicholls, general merchant, Gorrie, Ont., has assigned to James Perkins, of the same place, and a meeting of his creditors will be held on Nov. 2.

PARTNERSHIPS FORMED AND DISSOLVED.

Ferron & Ferron, general merchants, Ste. Flore, Que., have dissolved.

Russell & Co., hardware merchants, Greenwood City, B.C., have dissolved partnership, J. J. Caulfield retiring.

In the firm T. Lemyre & Co., general merchants, Grande Piles, Que.; Allberic Corrigan registered as special partner for \$50.

SALES MADE AND PENDING.

D. McMurtry, general merchant, South March, Ont., has sold out.

The stock of George Giller (estate of) general merchant, Berlin, Ont., has been sold.

Thomas Dobbie, general merchant, Chesley, Ont., has sold out to John C. Mossington.

The stock of the estate of H. L. Brown, bicycle dealer, Clinton, Ont., is to be sold by tender.

Larochelle & Fils., general merchants, St. Henri (Levis), Que., has been sold out by bailiff's sale.

Wm. Wyatt and Son, stove dealers and tinsmiths, London, Ont.; are advertising their business for sale.

The assets of O. Corbeille & Co., hardware merchants, Montreal, have been sold at auction.

CHANGES.

Noble & Barber have started business in Montreal as electrical contractors.

J. Perron has commenced business as general merchant in St. Irene, Que.

Arthur Guillette has registered as proprietor of the firm Guillette & Frere, general merchants, Farnham, Que.

Palma Quesnelle, blacksmith, St. Isidore (Prescott county), Que., have been succeeded by Cyrille Deschamps.

Joseph Desforges has registered as proprietor of the firm Desforges & Geoffrion, hardware merchants, Montreal.

Arthur and Rosairie Magnan have registered as proprietors of the firm Magnan Freres, hardware merchants, Montreal.

Napoleon Sarrassin and Alphonse Guimod have registered as proprietors of the firm, Guimod & Sarrassin, hardware merchants, St. Henri de Montreal, Que.

FIRES.

The Verity Plough Co., Limited, plough-makers, Brantford, has been burned out.

DEATHS.

Wm. Craddock, contractor, Chatham, Ont., is dead.

A. W. Hart, general merchant, Canso, N.S., is dead.

Solomon Sweet, general merchant, Sutton, Que., is dead.

Simon Hunter, dealer in sewing machines and pianos, Lunenburg, N.S., is dead.

THE RUMOR WAS WELL FOUNDED

The rumor which was made public in our last week's issue, that the Iver Johnson's Arms and Cycle Works, of Fitchburg, Mass., purpose to open headquarters in New York City, is now an assured fact, as they inform us they have just completed arrangements for the lease of the first and second floors at 99 Chambers street, which they will use as salesrooms and offices for the transaction of their New York business.

The indomitable push and perseverance of this concern have placed them in the front rank of manufacturers, and in their combined product of cycles, revolvers and shot guns they are the largest makers in the United States.

Their large corps of agents in New York, Canada, Pennsylvania and New Jersey will naturally be gratified at the move taken by the house, as the increased facilities for making quick shipments will, of course, greatly advantage them.

The makers of "honest goods at honest prices" are to be congratulated upon their success in securing so good a location, and no doubt they will enjoy a large business at their new branch.

FOR SALE.

FOR SALE.—OLD ESTABLISHED HARDWARE Business in substantial town in Western Ontario. Stock and Shop in first-class shape. None but those who mean business need apply. Terms easy to a good man. Address Box 17, HARDWARE AND METAL, Toronto.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales made and repaired.

Write for Catalogue.



Globe Files and.... Rasps

We manufacture a full line of these goods from high-grade Crucible Steel.

Mill Saw Files

Taper “ ”

Bastard “ ”

Warding “ ”

Swiss “ ”

Horse Rasps

Shoe “ ”

Cabinet “ ”

And warrant every File and Rasp bearing our Trade Mark.

The Globe File Mfg. Co.

PORT HOPE, ONT.

STATISTICS OF U.S. RAILROADS.

THE ninth annual report of The Inter-State Commerce Commission has been issued. It comprises figures for the year ending June 30, 1896.

The number of passengers carried during the year ending June 30, 1896, was 511,772,737, being an increase of 4,351,375 as compared with the year ending June 30, 1895. That year, however, showed a decrease of 33,266,837 as compared with 1894. The number of passengers carried one mile during the year was 13,049,007,233, showing an increase as compared with the previous year of 860,560,962. The corresponding decrease of the year 1894 was 2,100,999,622. The number of passengers carried one mile per mile of line—that is, the figures indicating the density of passenger traffic during the year ending June 30, 1896—was 71,705, an increase of 3,133 in this item being shown. The corresponding decrease as shown by the report of 1895 was 12,761. The number of tons of freight carried during the year under consideration was 765,891,385. This is the largest tonnage ever reported for railways in the United States. The increase during the year was 69,130,214. The number of tons of freight carried one mile was 95,328,360,278, there being an increase of 10,100,844,387. The density of freight traffic is shown by the number of tons of freight carried one mile per mile of line, which was 523,832. These figures, as compared with those of the preceding year, show an increase of 44,342 ton-miles per mile of line.

In the conclusion of his report the statistician repeats the recommendations contained in previous reports, to the effect that reports should be secured from express companies engaged in inter-state traffic; that reports should be secured from corporations and companies owning rolling stock which is used in inter-state traffic, and special reports from corporations and companies owning depot property, elevators and the like; and that reports should be secured from carriers by water, so far as their business is inter-state traffic.

The report closes with extracts from recommendations adopted at the National Convention of Railroad Commissioners, held at St. Louis in May last, in support of the proposition to establish a Bureau of Statistics and Accounts in connection with the Inter-State Commerce Commission, an argument in favor of which was quoted in the statistician's report for 1895 from the ninth annual report of the commission. Among the points which in the view of the National Convention should be embodied in a law were the following:

"First, it should provide for the appointment of railroad examiners by the Inter-

State Commerce Commission, and so define the duties of said examiners as to insure the keeping of the books of corporations subject to the Act to regulate commerce according to the principles and rules laid down by the commission.

"Second, it should prescribe that annual and monthly reports should be filed with the Inter-State Commerce Commission, which should be passed upon by the examiners, and in case of discovery of abuses, such use should be made of the reports as may lead to appropriate legal remedies.

"Third, it should provide for the establishment of a Bureau of Statistics and Accounts, under the direction of and in connection with the Inter-State Commerce Commission; and give to the commission the right to promulgate through this bureau

rules and regulations according to which accounts should be kept by the corporations subject to the Act, to the end that the last clause of the 20th section of the Act to regulate commerce may be made effective.

SCREW THRUST VS. RESISTANCE.

J. H. Allan, in Dixie, calls attention to the fact that is not widely known: that the thrust of a screw at the stern of a vessel is widely different from the resistance of the vessel itself. It is asserted that if ships could be pulled through the water instead of being pushed by the propellers now in use, an average saving of about 40 per cent. in engine power would be made. The reason is that the screw, and the paddle also for that matter, pushes the water away from the vessel, thus lessening the pressure at the stern, and consequently adding just that amount to the unbalanced pressure at the bow.

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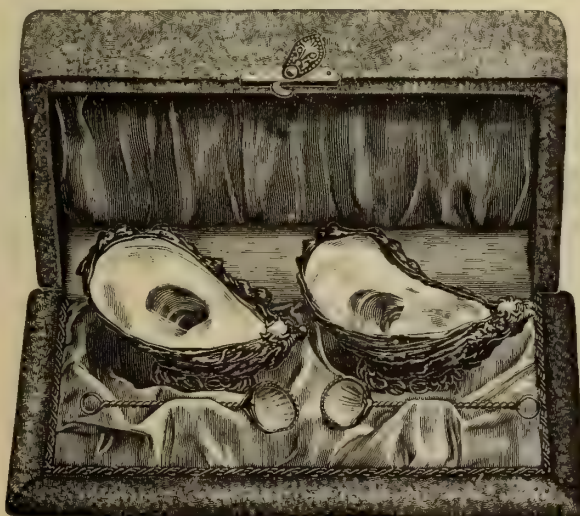
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Confirm this by seeing what we have to offer, either through our traveler, by catalogue, or through your jobber.

THE TORONTO SILVER PLATE CO. Limited

E. G. GOODERHAM,
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Factories and
Salesrooms

TORONTO, CANADA

PECULIARITIES OF SPONGES.

THE following is an extract from the report of the British Consul at Naples in regard to the sponge industry of Southern Italy :

The immense volume of the sponge trade and the manifold uses to which sponges are put by civilized mankind, from the cradle to the grave, together with the fact that of late years it has become an industry of Italy, whereas formerly the fishermen were nearly all Greeks, have suggested to me the following observations for publication : In the first place, it is desirable to understand what a sponge really is, and for this purpose permission has been obtained from the editor of the popular handbook to the Naples Aquarium to extract a few of the leading facts which biologists have ascertained respecting this remarkable animal ; for science has declared that the sponge is an animal, and the process by which this dictum was arrived at is particularly interesting. The distinction between animals and plants is sometimes so fine that it is no matter for wonder that mistakes were often made by the earlier school of naturalists, and it is only by applying the differential tests that the truth can be ascertained. Thus, a piece of sponge, when burnt, gives off a smell as of burning hair or horn, and exact analysis shows it to be allied to these substances. Again, though a living sponge is fixed and apparently motionless, the holes in its surface are capable of opening and shutting, and from the largest of them, when open, a stream of water issues which is supplied by innumerable smaller holes, generally invisible except under the microscope.

YOUNG SPONGES.

Young sponges, varying from microscopic size to that of a pin's head, swim freely about by means of little waving hairs upon their surface, until they reach an age when they prefer security to independence and monotony to danger. Finally, it has been proved that sponges live on solid food. While thus possessing all those characters that are more frequent among animals than plants, they never contain any traces of the cottony and woody substances especially characteristic of the vegetable kingdom. The water entering by the small pores passes through a system of branching and fine canals, and is collected again by a similar system into the outflowing current from the large holes. At the junction between the two systems of tubes are the most vital organs of the sponge, little swollen cavities of microscopic size, walled in with tiny living particles, each bearing a vibrating hair with which it lashes on the current, and a transparent filmy skirt with which it catches any food that may pass. All this

labyrinth of canals and cavities is living soft flesh. To prevent it falling a prey to the first hungry animal that passes, it is set through and through with little flinty needles or thorns.

SPONGE OF COMMERCE.

The sponge of commerce during life shows only the largest of its numerous holes; over all the rest the dark, slate-colored flesh forms a continuous film. It is obtained by diving, dredging or harpooning with a long trident.

LEVANTINE SPONGES.

Of the different kinds the finest and most costly is the Levantine sponge, which extends on all the Eastern Adriatic and Mediterranean shores. It is not found west of Naples, indeed on the Italian coast no sponges occur in remunerative quantity, though recently some beds have been discovered near Sicily.

ZIMOCCA SPONGES.

The harder Zimocca sponge from Asia Minor and Egypt fetches about one-tenth of the price of the Levantine, as does the coarse horse-sponge which is found in all the Levant, and extending along Africa to the Straits of Gibraltar.

After the removal of the soft parts of the sponge the fishermen usually fill the skeleton with sand so as to increase its weight and obtain a higher price for it. In rinsing a new sponge it is well to add a little hydrochloric acid to the first water in order to remove all foreign substances. The sponge of commerce is rarely found in the Bay of Naples. It chiefly frequents rocky coasts and coral reefs ; it does not live in very deep waters where its elastic skeleton is no use, nor in very cold ones where we must suppose that the material composing it cannot be formed.

EXPORT OF LIVE SPONGES.

The Mediterranean sponge differs from and is superior to the sponge of Florida and the Bahamas, which form a large part of the British supply, and it has been in contemplation to export living sponges from here to those countries for propagation. No forecast can be made of the result of such an experiment, except that it would be a very costly one, as the living sponge must be taken up together with a portion of the rock upon which it grows, placed in a special tank on board a steamer so constructed that an equal temperature could be preserved throughout the voyage, and then the locality of the new colony would have to be carefully selected in order to keep up the distinction between the natives and the colonists.

TREATMENT OF SPONGES.

In the ordinary course of sponge fishing the fisherman, having once secured the

sponge, proceeds to prepare it for the market. In this climate the animal rapidly decomposes if exposed to the air, and as soon as this process has set in the body must be rapidly beaten, or washed in running water till the fleshy substances are thoroughly removed. If decomposition has advanced too far, no process is known by which the skeleton can be purified and rendered fit for use.

SPONGE CHOLERA.

The sponges when cleaned must be thoroughly dry before any attempt is made to pack them ; for, if among the sponges packed any should be damp, they will assuredly heat and develop orange-colored spots which the Greek fishermen call "sponge cholera." Thus dried the sponges are conveyed to market. The mean price of fine Levant sponge is about 14s. per lb., and of common sponges 6s. per lb. This includes, as we have suggested, the sea-sand which the fishermen put into them. From the market the sponges go to the wholesale dealers all over Europe, who trim them up for domestic use, and disperse them amongst the retailers. These often resort to the undesirable process of bleaching them. This process is accomplished by the use of chemicals, which always have a deteriorating effect on the tissues of the sponge.

SPONGE FARMING.

Mutilation injures a sponge but little. Divided with a sharp razor even the smallest fragments retain their life, and under favorable conditions they will live and grow. So much is this the case that experiments in sponge-farming have been made, but the results have not been sufficiently sure to make the enterprise assume a practical form. Its advocates tell us that if a living sponge is cut into pieces with a sharp instrument, and the pieces fastened to canes immersed in clean sea-water, the fragments will grow to marketable size in five years, when, of course, they can be fished without expense or trouble. The great practical obstacle is in establishing ownership over a suitable spot, apart from the initial difficulty of finding such a spot. There is just that difference between cultivating oysters and sponges, that the former can be grown in waters where ownership is obtainable, and where stealing them would bring an offender in reach of the law, whereas this is not the case with sponges.

SPONGE MARKET.

The principal market in Europe for sponges is Trieste, the annual turnover being reckoned at £110,000. Sponges are found pretty well all over the globe, and as far as is known have no particular breeding time, so that a close season for the fishery does not seem to be required.

THE PRINCIPLES OF BUSINESS.

NO calling requires a greater use of brain power than business, and few require a higher order of general ability, says an economist writer. The great secret of success in business—the secret in fact, of success on a large scale—is to conceive of it as a matter of principles, not merely as a series of transactions. There are great merchants as there are great statesmen, and there are small merchants as there are small politicians, and the difference between the great and the small men is very much the same in both. The small politician works by the day, and sees only one opportunity before him; the small merchant does the same thing—he is looking for the next dollar. The statesman, on the other hand, is master of the situation, because he understands the general principles which control events; this knowledge enables him to deal with large questions and to shape the future. The great merchant does the same thing. His business is not a mere money-getting affair, not a mere matter of barter, but a science and an art; he studies the general laws of trade, watches the general condition of the country, investigates present needs, foresees future wants and adapts his business to the broad conditions of his time and place. He puts as much brains into his work as does the statesman, and he ends by being not a money-getter, but a large minded and capable man. An eminently successful man of the statesman-like quality said the other day that the more he understood life the more clearly he saw that it was all done on business principles, by which he meant, not only that the universe is governed by unvarying laws, but that the promptness, exactness, thoroughness, and honesty are wrought in every fibre. On these business principles all life is conducted—if not by men, at least by that power which is behind man. It ought to be the ambition of every young man to treat his business from the point of view of the statesman, and not from that of the politician.

DEATH OF WALTER FAIRBAIRN.

Mr. Walter Fairbairn, lately with the McClary Manufacturing Co., Limited, London, is dead, aged 77. Mr. Fairbairn was one of London's oldest residents and sterling citizens. He came to London in 1849, from Hawick, Scotland, and had resided continuously in this city since. At one time he was in the employment of Mr. Murray Anderson, and laterly with the McClary Manufacturing Company.

Mrs. Fairbairn died in 1883. He leaves to mourn his loss two sons, John, of Detroit, and Richard, of the Department of Public Works, Toronto; Mrs. (Dr.) Dickson, of Galt, and Annie and Janie, of London.



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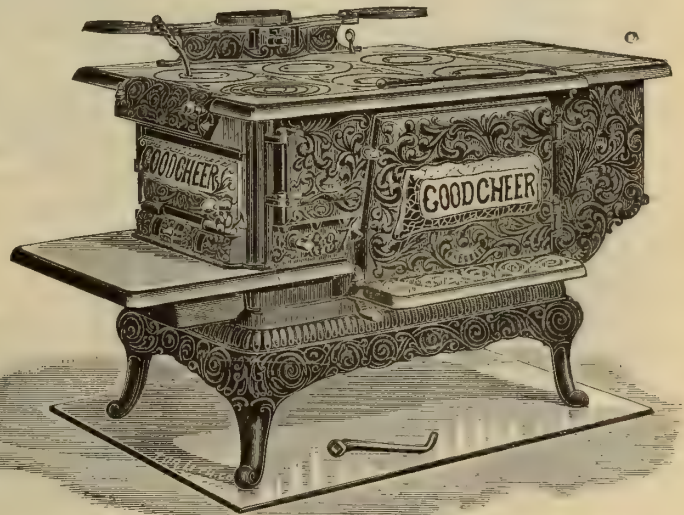
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Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

AMONG THE RETAILERS.

Variety of Display.

What a conglomeration of household articles can be congregated in a hardware store window, and all in an attractive style! My attention was drawn to the heterogeneousness of the goods in a window on Queen street west, Toronto, the other day, and the following are some of the articles I noticed: pails and pie tins, kettles and coal oil cans, coffee pots, cups and cake beaters, spittoons and sauce pans, steamers, strainers and scoops, measures and mouse traps, boilers, ladles and lanterns, watering cans and powder horns, dippers and dinner horns, grates and gridirons.

A Late Fall.

The continued warm weather has naturally affected the retail hardwaremen of the city. Paints and oils continue in good demand, for finishing up buildings before the cold weather sets in. A large business is also being done in small hardware, especially for stable and other out-door

uses. In all lines of summer goods there is still a much greater demand than usual. The stove trade with the retailers is not quite what was expected it would be, but two or three really cold days will probably effect good results in this line of goods. Some dealers, however, report quite a lively stove trade, noticeably John Milne & Co., Yonge street, and C. P. Godden, King street east.

Gas Radiators.

McDonald & Willson, Yonge street, Toronto, have a nice display of gas fixtures and gas radiators in their window. They have gone extensively into the gas fixtures business, and report that the cool weather has favored them greatly, many people buying the gas radiators, which are more easily looked after and only cost 2 or 3c. an hour to run.

Cream Separator.

Thos. Meredith, King street east, Toronto, has been appointed York County agent for the "Butterfly" cream separator, a machine which by a new and improved pro-

cess separates the cream from the milk. Mr. Meredith gave an exhibition of the machine's powers on Saturday to many interested.

Small Windows.

I frequently hear the remark that the hardwaremen who have large windows are at so great an advantage over those who have but small ones that the latter have no chance to compete with them. There is some truth in this, but it is not altogether the case, as one of the most noticeable windows on Yonge street, Toronto, is a comparatively small one. It is, however, a good, bright one and well arranged. The bottom, sides, etc., of it are covered with a reddish-colored texture, which shows off to advantage the goods displayed. On the floor of the window is arranged a good range of carving sets, etc., the sides show a great variety of shears and scissors, and a shelf is arranged in a slanting position about three feet from the floor, on which are displayed razors and knives of all sorts and sizes. Price-tags here and there give at once the information required.

THE RAMBLER.



THE INCOMPLETE ANGLER.

JOHN BULL: "I don't seem to be doing as well as I did."

JOE. CHAMBERLAIN.—"Well, if you want to get the better of those foreign chaps, you must choose your fly to suit the fish—as they do."—Punch.



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STRONG AND SURE,
WITH A FIRM AND
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—Longfellow.

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WISH THUS TO BUILD
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TORONTO
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Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high
11 inches wide
17 inches deep

2 SIZES WITH OVEN

2 SIZES WITHOUT OVEN

Manufactured by

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Agents for Manitoba and Western Territories, Merrick,
Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and
P. E. Island, W. L. Haldimand & Son, Montreal.

A MONTREALER'S ENTERPRISE.

One of the largest foreign enterprises that a Canadian contractor has yet undertaken, it is said, will shortly be carried out in Jamaica, W.I., through the efforts of W. B. Chapman, of Montreal. This gentleman has for some time been negotiating for an electrical tramway franchise, and has at last secured a charter from the Government to build 25 miles of road on the island, in the vicinity of Kingston, which, it is estimated, will cost \$500,000. Associated with Mr. Chapman are said to be F. S. Pearson, of the Metropolitan Street Railway, this city, and B. F. Pearson, of the Halifax, N.S., Tramway Co. The new enterprise will be known as the West India Electric Co. A large power house will be built and electric lighting will also be taken up. Considerable material will necessarily be required for this plant, and bidders for material must count upon keen Canadian competition.—N.Y. Journal of Commerce.

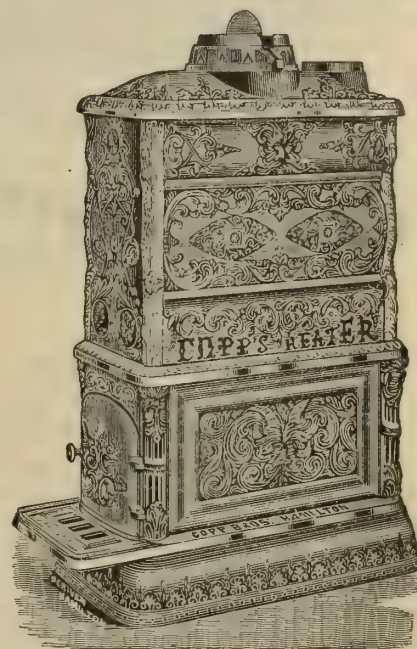
A WORD TO CUTLERS.

I have often noticed (writes a correspondent) that when ladies select scissors they pay more attention to the points than to any other detail. Neither beauty of design, excellence of finish, nor goodness of material is regarded by them as of equal importance to well-shaped and very sharp points. Some makers are more careful in this respect than others. Speaking generally, German manufacturers have not overlooked its importance. The cheaper sorts of English scissors, though otherwise good, are in this particular not as carefully made as the foreign articles. It is a pity that the sale of articles of sterling quality should be hindered through inattention to what is, after all, a mere trifle. Yet such is the case.—"Vulcan" in Ironmonger.

THEY MUST CUT.

A Sheffield firm who have for many years done a very large cutlery business with America have this week received their first season's orders for carvers. There was an apprehension that the immense quantities of this class of goods sent out before the new tariff came into operation would seriously affect the trade, but the present orders are of the usual weight, and it would seem that the increased tax has not interfered with the demand. Probably the explanation is that the Americans cannot yet produce these carvers as cheaply as can be done in Sheffield, notwithstanding the advantage gained by the heavy tariff. A somewhat cruel insinuation is made by a well-known Sheffield manufacturer in the remark, "You see, carvers must cut."—Hardwareman.

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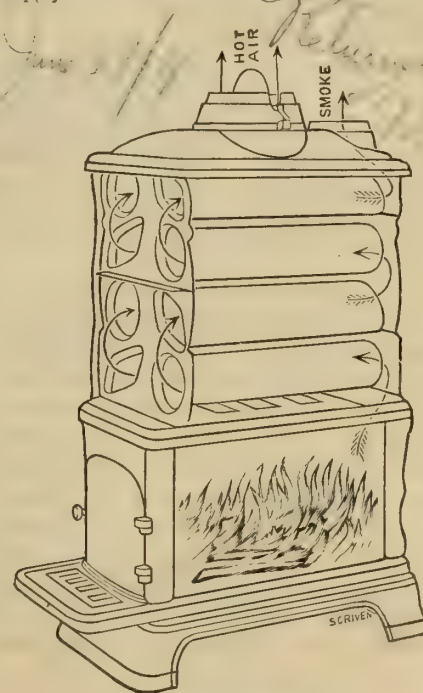


Our Copp Heater is a marvelous success, and has no equal.

It will render a larger increase of trade, as well as greater profit to the dealer, than any other stove made.

Its capacity is from 15 to 20 thousand cubic feet, and obtained with small consumption of fuel.

We shall be pleased to give further information upon enquiry.



Sectional Cut.

This cut shows the manner of conducting the combustion from fire-box to exit, after travelling over 14 feet. Direct draft dampers are provided.

The cold air passing in under the centre ring is forced in contact with the peculiarly shaped steel tubes, thereby becoming intensely heated.

One size burning 34 inch wood.

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THAT IS WHAT

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The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

PROPER HANDLING OF THE KITCHEN RANGE.

THE cooking apparatus is no doubt one of the most important arrangements we have in our house, and on it depends in great measure, not only the healthy or sickly appearance, but the good or bad humor of the family, writes J. J. Lawler in *American Artisan*. If the range is doing its work well it will be a double delight. First, in the appearance and taste of the food cooked while in such condition, and the ease with which it is done. If, on the other hand, the range is cutting up and not acting right, the pies will burn on the bottom and won't even brown on top, or vice versa, the roast takes twice the time it should, and the bread is all dough. When this happens we can easily imagine the feelings of every member of the house, and the great worryment of the cook. Therefore, it will be seen that the range is indeed a very important apparatus, and one that should be thoroughly understood.

DIFFERENCES IN RANGES.

While nearly all cooking ranges work on the same general principles, still there are often great differences in the action of them. And, as a rule, the least complicated will be found to give the best results. There are a few simple rules in regard to the management of the range that must be properly carried out in order to get the most satisfactory results. It is first necessary to understand the principle upon which the range works, otherwise we will be apt to forget what attention it requires from time to time. While if we thoroughly understand its working principles (and we should know them) we can never forget to keep it in good working order.

GOOD DRAFT NECESSARY.

One of the most essential things for the satisfactory work of the cooking range is a good draft. So the place to begin is with the kitchen chimney. If this is constructed so that it will draw well under every condition of the atmosphere, we will have already

more than one-half accomplished the satisfactory working of the range.

The next thing that is quite necessary is the proper amount of fire. The best range in the world will not roast or bake well with a handful of fire. When heavy work is to be done there must be a heavy fire in proportion to do it, and with a good draft and the proper coal there should be no excuse for a poor fire. It takes a bright, clear fire, without ashes, to roast and bake in the best constructed range.

WE MUST UNDERSTAND THE DAMPERS.

If we have a good strong draft, plenty of fire, bright and burning well, and still not getting enough heat for the ovens, there will be just one or two things wrong, or perhaps they may both be wrong at the same time. And that is the heat from the fire is not going in the proper direction. Some dampers may be turned so that the heat will pass up the chimney without going around the oven. And if it is passing through the proper channel to heat the oven, then it requires cleaning. Soot and dust are very good non-conductors of heat, and when it is a couple of inches thick in the flues and over the oven plates, it will be impossible to have any satisfactory results from the oven.

There should never be more than one damper in ranges, handled even by the most intelligent person. And when used by persons of only ordinary intelligence there should not be a damper at all. It would be better in this case to allow the heat to pass around the oven at all times.

BRAINS REQUIRED FOR THE RANGE.

Although constructed on the most simple principles, it appears there can be no satisfactory results from the range unless the person who uses it is possessed with a fair share of intelligence. Very bad judgment is used in the regulation of the drafts. When it is necessary to dampen the fire I often notice some of the covers left off, and at the same time the draft door at the bottom allowed to remain open. This checks the

fire to some extent, but it does not do what is wanted. Here is where a little judgment is required. A fire cannot help but burn if it has air passing in at the bottom and an opening above for its escape, so that in this case it is really not dampened, but checked, and also in this case the whole house is made to act as a chimney.

This is noticed more generally after meals, where some persons burn the swill or waste food, which can be noticed all over the house.

EASY TO AVOID SUCH ODORS.

There is not the slightest necessity for any of this odor from the range fire circulating through the house at any time. If we wish to burn food of any kind in the range fire it can be done without destroying the entire atmosphere of the house. But the time to do it is when the fire is the hottest, as it requires quite a hot fire to properly burn such matter. And while it is burning all the covers must be closed on top of the range and the most direct dampers to the chimney opened. We should not at any time be able to notice the smell of anything burning in the fire, because if we do notice such odors we then know that in place of all the products of combustion from the fire passing up through the chimney, where it is all intended to go, some of it is passing around the rooms of the house, and therefore something is wrong in regard to the drafts of the fire.

As a rule, most cook stoves and ranges have what is called a broiling door. This is a long flat opening above the fire and below the top plate opposite the centre of the fire in front. If this door is used when broiling, with all the covers on, we will get no odor from the meat in the kitchen nor in other parts of the house. And this same thing can be used when we wish to dampen the fire and leave it for the night. Close up all the bottom drafts to the fire, and this will not only keep the fire dampened, but it will prevent coal gas, sulphur or odors of any kind coming from the fire, which destroys the entire atmosphere of the house and has often destroyed human lives.

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REQUIREMENTS FOR ROLLING STOCK.

Our investigation leads to the conclusion that to put the rolling stock of the railroads of the United States on a normal basis of efficiency the orders to commercial builders in the year 1897 must amount to 2,342 locomotives, 97,246 freight cars, and 5,400 passenger cars. If this is true, it is worth while to compare the figures with the orders that have already been given out this year. The news columns of The Railroad Gazette contain not only the latest information of probable demands by the railroad companies, but also a pretty accurate record of orders given, and we find that for the first nine months of the year the orders placed with contracting companies have amounted to 771 locomotives, 27,700 freight cars and 179 passenger cars. Only 77 railroad companies have ordered new locomotives during the year, and the freight car orders have been placed by about the same number of companies. Or, if we are correct in our figures, about one-third as many locomotives have been ordered during the year as ought to be built to bring the equipment up to a proper standard, and in fact the orders have been just about one-third of the number built by the contracting companies in the year 1890. The freight cars already ordered amount to considerably less than one-third of the estimated requirements and the passenger cars to about one-thirtieth.—Railroad Gazette.

HE ACCOMMODATED HIS CLERK.

A newly engaged clerk in the employ of the Standard Oil Co. was sent to work in a small room that contained a health lift. Every morning at about 10 o'clock, when this clerk was particularly busy with figures, a small, black-mustached man, quite diffident in manner, entered, said "Good morning," walked on tiptoe to the corner, and exercised for a quarter of an hour. It became a bore to the clerk, who at last one day remarked with considerable heat to the stranger:

"How do you expect me to do my work properly while you are fooling with that blasted machine? I'm getting tired of it. Why don't you put it where it won't worry a person to death?"

"I am very sorry it annoys you," said the stranger, flushing; "I will have it removed at once."

A porter took it away within an hour. A few days later the clerk was sent for by Mr. Flagler, whom he found in earnest conversation with the small, black-mustached man. The latter smiled at seeing him, gave Flagler some instructions, and left the room.

"Will you tell me who that gentleman is?" the young man asked, a light beginning to break upon him.

"That was Mr. Rockefeller," was the reply.—Boston Journal.



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Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

THE PLUMBER AND THE HEATING CONTRACTOR.

IN a discussion between a number of tradesmen, some who did only heating, some plumbing alone, while others did both kinds of work, the question was asked why it was that the heating contractor had to meet but very few legal requirements, but was held to much stricter account for his work by his customers than the plumber, remarks a writer in *The Metal Worker*. To the disgust of the plumber, one heating contractor claimed that the heating contractor had to be a more intelligent man than the plumber, because of the nature of his work. The discussion was fast taking the form of an argument, when one man who did both kinds of work ventured to state that if a plumber and a heating contractor were to do work of about the same cost in a building, and if the plumber's work was badly done, it would probably remain undiscovered for a long time, and cost the plumber nothing, while if the heating contractor's work was badly done the first few days of winter would demonstrate this, and the deficiency would have to be made good, and in many instances a portion of the purchase money would be held until a weather test was made of the work.

A little reflection on the part of those present brought forth the agreement among the plumbers that a most rascally job could be done where there were no stringent regulations and inspection was not required, and the owner remain ignorant of it until some dire calamity had visited him to bring it to his notice, and then, in all probability, there would be no redress, and the owner would have to bear the expense of remodeling as well. Those present who had done heating work testified to the uniform practice in their trade to guarantee to provide a given temperature under specified conditions, and the business reputation and responsibility of the house were involved before a contract was placed in many instances, so that the buyer might be sure that any defect that might be discovered would be made good. A slight error in judgment in some detail might necessitate a considerable expense in a heating plant to make it right, while a vent pipe could be run into a partition and stop there instead of being carried to the roof, and

other similar pieces of rascality in the plumbing line, might pass unnoticed for years.

The custom of the public has been to hire any man who hung out a sign as a plumber, providing his price was low, the only restriction being that their property should not be deluged with water, which seemed to be the only guide as to efficiency. The movement on the part of good plumbers and the health officials to set up other standards of efficiency is, however, rapidly overcoming this evil. The heating man, on the other hand, while meeting just as sharp competition from low prices, is forced for self-preservation to understand his business well enough to know in advance the amount of heating the plant he provides will do, for in the event of failure he must at his own expense supply whatever is necessary for success. If this does not require the heating contractor to be more intelligent, as was inferred, it certainly makes him more careful, for while people may be careless of their health, they are very exacting in whatever affects their comfort.

TORONTO MASTER PLUMBERS' ASSOCIATION.

The Toronto Master Plumbers' Association held their regular monthly meeting on Monday last with a large and representative attendance.

The association has now nearly all the master plumbers of the city included in its membership, and it was decided to make special efforts to induce the few not having joined to become members thereof.

The price list of the association is being revised, and the members were informed that the new list would be ready for the next meeting.

LOOKING FOR THE PLUMBER.

Get your tools together, boys,
Prosperity is here;
So do not be discouraged,
For the sky is getting clear.
The building trade is growing,
And the boom is sure and sound,
They'll be looking for the plumber,
And
he
must
be
found.

The tariff question settled,
And the money market brisk,
Will cause the man of capital
To take a building risk.
The owner and the architect
Are sure to be around,
They'll be looking for the plumber,
And
he
must
be
found.

Remember, you're important,
And keep yourself in trim;
Have cloths and tools in order,
You're surely in the swim.
When they get the building ready,
They will want us on the ground;
And be looking for the plumber,
And
he
must
be
found.

So make your calculations
For a glorious season's run;
The architects are busy,
The building must be done.
See the master plumber,
Let him know that you're around,
He'll be looking for the plumber,
And
he
must
be
found.

—Plumbers' Trade Journal.

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power.)

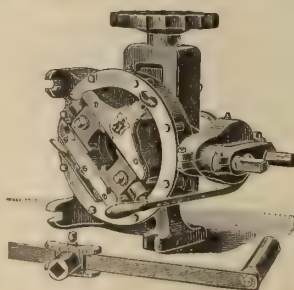
Armstrong's Adjustable Stocks and Dies,
Vises (hinged), Wrenches, Pipe Cutters,
Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

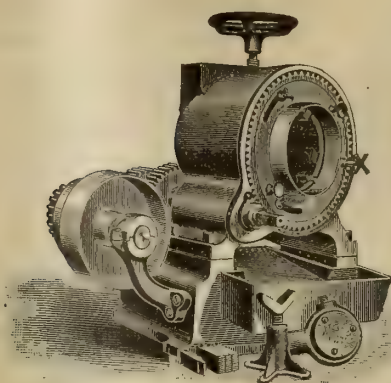
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

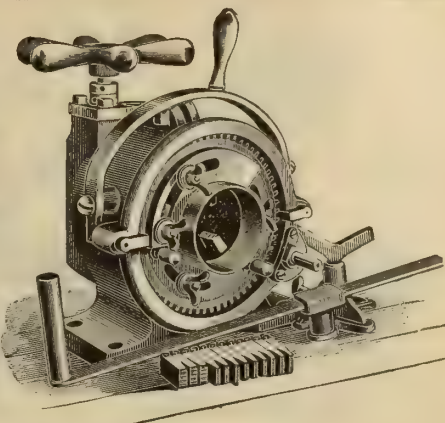
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from 1/4 to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range 2 1/2 to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range 1/4-2 inch. R. & L.

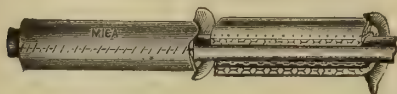
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

**SMALL
RUBBER
GOODS**

H.O. CANFIELD - BRIDGEPORT, CT.

**MOULDED
RUBBER
GOODS**

Hardware, Plumbers' and Bicycle Specialties.

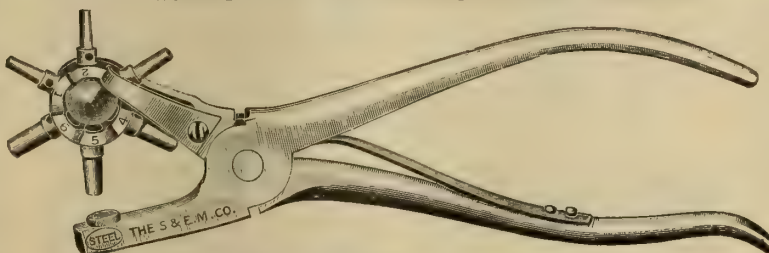
OUR GOODS ARE WELL KNOWN IN CANADA.

NO 3

1897

CATALOGUE

Send for it.



NEW REVOLVING PUNCH.

Mention this paper,
Canadian HARDWARE
AND METAL.

THE SMITH & EGGE MFG. Co., Bridgeport, Conn., U. S. A.

PLUMBING CONTRACTS.

Commercial exchanges report that M. S. Rose, plumber, of Vancouver, has satisfied a chattel mortgage for \$1,230.

Guest & Co., Toronto, have the contract for the gas-fitting and plumbing of a residence in Little York, and for two organ motors in Brantford.

The Bennett & Wright Co., Limited, Toronto, have the contract for the plumbing and heating of a residence on Bloor street west, for Mr. G. E. Rowan; also plumbing and heating contract for a large residence in Rosedale for Mr. Andrews.

The Keith & Fitzsimons Co., Limited, Toronto, have the contract for the gas and electric fixtures for the new residence of Sir George Kirkpatrick, Lieut.-Governor of Ontario, Simcoe street; the gas and electric fixtures for several residences on St. George

street; and the alteration and extension of the plumbing and steam-fitting of the Western Assurance Co., Scott street, Toronto.

BOARD OF EXAMINERS PROPOSED.

THE Chicago Commissioner of Health has presented a communication to the Council of that city advising the appointment of a board of examiners for the examination and certification of plumbers. He proposes that an ordinance should be passed so that all persons engaged in the business of plumbing either as master plumber, employing plumber or journeyman plumber, must obtain a certificate, which should be given when the applicant has appeared before the Board of Examiners and passed the necessary examination.

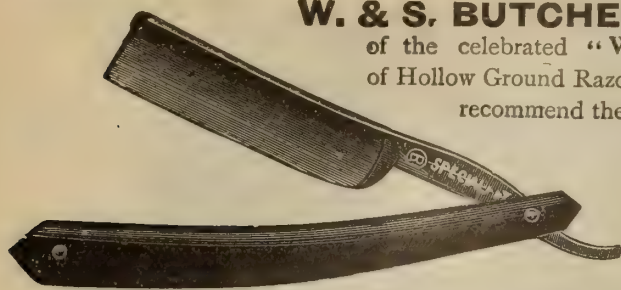
If the suggestion becomes law it is to be hoped it will not be the dead letter a similar law is in Toronto.

PLUMBING PERSONALS.

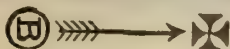
E. C. Mount, of Mount & Co., and J. Lamarche, of Montreal, have gone with a party of six to Glen Gordon on a deer hunt.

E. C. Mount & Co., of Montreal, have the contract for plumbing, heating and ventilating two houses for A. F. Dawes, Lachine.

J. H. Gardner & Bro., of Montreal, have secured the contract for plumbing, heating and ventilating two houses for D. MacLennan, and another for plumbing, heating and ventilating one house for Mr. Lang; also the contract for plumbing, heating and ventilating a house for Mr. Glass.



WADE & BUTCHER,
SHEFFIELD, ENGLAND.

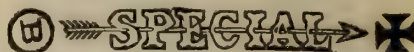
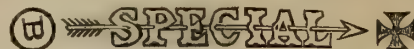


JAMES HUTTON & CO., Agents,

Montreal

W. & S. BUTCHER, Sheffield, England, Makers for over ONE HUNDRED YEARS
of the celebrated "WADE & BUTCHER" Razors, and the Original Manufacturers
of Hollow Ground Razors, can with confidence highly
recommend their goods and particularly their

Brand as being the most perfect **Extra Hollow Ground** Razors ever
manufactured and especially suited for the use of Barbers and for private use. Genuine Razors are marked with one of the following Corporate Trade marks:



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

CURRENT MARKET QUOTATIONS

TORONTO, Oct. 29, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

.L.S., equal to Bradley. Per box. \$5 00
I.C., usual sizes 6 25
I.X., " 7 50
J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X., " 4 25
I.X.X., " 5 00
D.X., 12 1/2 x 17 3 00
D.X., " 3 75
D.X.X., " 5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base. 3 15
20x28. 6 25

Charcoal Plates—Terne.

Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 7 50
I.X., Orion 7 50

Charcoal Tin Boiler Plates. Per lb.

X.X., 14x56, 50 sheet bxs }
14x60, " } 0 05 1/4 0 06
14x65, " }

Tinned Sheets.
72x30 up to 24 gauge. 0 06 0 06
26 " 0 06 1/2 0 07
28 " 0 07 1/4 0 07 1/2

Iron and Steel.

Base Price
Common Bar, per 100 lbs 1 50 1 55
Refined " 1 80
Horse Shoe " 1 80
Band " 1 75
Hoop " 2 00
Swedish " 4 00 4 25
Sleigh Shoe Steel " 2 50
Tire Steel 2 50
Machinery 2 75 3 00
Cast Steel, per lb 0 10 0 11
Russian Sheet, per lb 0 10 1/2 0 11
Tank Plates, 1-5 and thicker. 2 00 2 25
Boiler Rivets 4 50 5 00

Boiler Tubes.

1 1/2-inch 0 06 1/4
2 " 0 07 1/2
2 1/2 " 0 09 1/4
" 0 11

Steel Boiler Plate.

3-16 inch 2 00
" 1 90

3/8 inch and thicker 1 75

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 35 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 30
All bright 2 90

Iron Pipe.

Wrought, 3/4 to 3/8 inch, 1 1/4 c.; 1/2 inch, 2 1/4 c.;
3/4 inch, 2 7/8 c.; 1 inch, 3 3/4 c.; 1 1/4 inch,
5 c.; 1 1/2 inch, 6 4/5 c.; 2 inch, 8 3/4 c.
Galvanized, 60 per cent.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge 0 03 1/2
18 to 24 gauge 0 03 3/8
26 " 0 04 1/2
28 " 0 04 3/8

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/2 " " " 4 75
" 5-16 " " " 4 00
" 3/8 " " " 3 75
" 7-16 " " " 3 35
" 1/2 " " " 3 25
" 9-16 " " " 2 95
" 5/8 " " " 2 85
" 3/4 " " " 2 75

Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 1/2 12
Lake Superior 12

Bolt or Bar.

Cut lengths, round, 1/2 to 7/8 in.
round and square
1 to 2 inches 0 18 0 19
NOTE.—Complete lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16

Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.

Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
35 to 45 " 0 15 1/2 0 16 1/2
50 lb. and above, " 0 15 0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb 0 21
Spun, per lb 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
eets, hard-rolled, 2x4 t 0 20

Foreign, per lb 0 04 1/2 0 05
Domestic " 0 03 1/2 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/2
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 1/2

NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 27 1/2 per cent. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Per lb. Per
Bar half-and-half 0 11 0 11 1/2
Standard 0 10 1/2 0 11
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb 0 08 0 08 1/2

Anti-Friction Metal.

Per lb.
"Beaver" brand \$0 20
"Tandem" A 0 19
"B 0 16
"C 0 10 1/2

White Lead.

Per cwt
Pure, Assoc. guarantee, ground in oil,
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 00
Brandram's B. B. Genuine 7 50
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
No. 1 6 20

Prepared Paints.

(In 1/2, 1 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 07
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J. F. L. S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
"Umber, " 0 10
do. aw 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2

Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb. 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs
25-lb. Irons
-lb. Boxes
Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk " 1 66
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish 0 65
Extra do. 0 90
Demar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net. 0 42 0 43
Boiled, per gal. net. 0 45 0 46
Outside points 2c. more than above figures.

Tarrentine.

1 to 4 barrels, net. 0 49
Outside points 2c. more.

Castor Oil.

In cases, per lb. 0 10
Small lots 0 11

Cod Oil, Etc.

Cod Oil, per gal. 0 50 0 55
Pure Olive 1 20
"Neatsfoot" 90

Glue.

(In bbls.)
Common 0 07 1/2 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet. 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to
30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent.
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Military,
Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin

	per lb	
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.

Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10

Angers.

Gilmour's, discount 65 p.c. off revised list.		
Hollow Stern's, per dozen.....	13 00	20 00
Adjustable Stern's, each.....	5 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.

Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddler's, per gross.....	0 45	1 60

Awl Hafts.

Patent Peg, oss.....	7 25	8 00
" Sewing, per gross.....		

Awl and Tool Sets.

Miller's Falls, per doz.....	2 80	3 30
------------------------------	------	------

AXES.

Splitting Axes.....	5 25	5 50
Chopping Axes—		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50

Axle Grease.

Per gross.....	6 00	13 00
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Bath Tubs.

Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount off revised list.		

Boxing extra

Bells.

Hand.

Brass, 60 per cent.		
Nickel, 55 per cent.		

Door.

Gon Sargent's.....	5 50	8
" Peterboro', discount 50 per cent.		

Cow.

American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.

American, each.....	1 25	3 00
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House.

American, per lb.....	0 35	0 40
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Bellows.

Hand, per doz.....	3 35	4 75
Moulders, per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.

Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.

Per doz.....	5 00	6 00
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Bits.

Auger.

Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		

Car.

Gilmour's, 47½ to 50 per cent.		
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Expansive.

Clark's, per cent.		
Excelsior, 10 per cent.		

Gimlet.

Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.

Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 12	1 20

Blind and Bed Staples.

sizes, per lb.....	0 7½	0 12
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Bolts.

Carriage, dis., 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.		
Store, dis., 70 per cent.		
Elevator, dis., 35 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.

Complete, with augers, each.....	5 00	7 50
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Braces.

Barbe's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Har's Falls.....	15 50	29 00

Brackets.

Shelf.

Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20

Broilers.

Light, dis. 65 to 67½ per cent.		
Reversible, dis. 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, ".....	6 00	
Henis, No. 9, ".....	7 00	
Queen City ".....	7 50	10 00

Butchers' Cleavers.

From 8 to ch, per doz.....	4 23	
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Butts.

Brass.

Wrought Brass, dis., 17½ p.c. revised list.		
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Cast Iron.

Loose Pin, dis. 70 per cent.		
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Wrought Steel.

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65

Can Openers.

Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50

Card.

Horse, per do.....	0 60	1 00
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Carpet Stretchers.

American, per doz.....	1 00	50
Bullards, per doz.....	6 50	---

Carpet Sweepers.

Bissell, per doz.....	22 50	
" World, ".....	21 75	
Daisy, ".....	24 00	
Star, ".....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		

Cattle Leaders.

Nos. 31 and 32, per gross.....	8 50	9 50
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Cement.

Canadian, Portland.....	2 50	
English.....	2 50	
Belgium.....	2 35	
Canadian hydraulic.....	1 10	
Figures are for barrel lots.		

Chalk.

Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18

Chisels.

Socket, Framing and Firmer.

American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00

Churns.

Daisy or Leader, dis. from stock or factory		
60, 10 and 10 per cent.		
Steel, net.....	3 00	

Clamps.

Judds', dis. 20 per cent.		
stearns, per doz.....	3 00	10 00

Clips.

Axle dis. 65 per cent.		
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Coffee Mills.

Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....	70	

Compasses, Dividers, Etc.

American, dis. 62½ to 65 pe cent		
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Cradles, Grain.

Canadian dis. 25 per cent.		
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Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.

Torrey's Rod, per doz..... (15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00

Draw Knives.

American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.

Hand and Breast.

Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.

Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 and 5 to 55 per cent.		

ELBOWS.

Stovepipe.

Per doz.....	75	1 70
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FAWCETS.

Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star, ".....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 50 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 to 60 per cent.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 to 60 per cent.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.

Each.....	0 60	2 00
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FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		
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FREEZERS

Ice Cream.

Gem from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.

Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.

Acme, dis. 65 to 67½ per cent.		
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GAUGES.

Marking, Mortise, Etc.

Stanley's, dis. 50 to 55 per cent.		
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Wire Gauges.

Winn's, Nos. 26 to 33, each.....	1 65	2 40
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GLASS.

Window.

Box Price.

	Star.	Per 50 ft.	Per 100 ft.	Double Diamond.	Per 100 ft.
Under 25.....	1 35	2 60	3 80		
26 to 40.....	1 50	2 90	4 15		
41 to 50.....	1 30	3 30	4 80		
51 to 60.....	1 30	3 60	5 50		
61 to 70.....	1 30	3 90	6 35		
71 to 80.....	1 30	4 30	6 90		
81 to 85.....	1 30	4 85	7 70		
86 to 90.....	1 30	9 10			
91 to 95.....	1 30	9 90			
96 to 100.....	1 30	11 50			
101 to 105.....	1 30	13 50			
106 to 110.....	1 30	15 75			

GLUE POTS.

Tinned, each.....	0 30	
Enamelled each.....	0 55	

GRINDSTONE FIXTURES

P. S. & W., per doz.....	3 60	4 00
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HAMMERS.

Nail

Maydole's, dis. 5 to 10 per cent.		
Can., dis. 25 to 27½ per cent.		

Tack.

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 50 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50

Cabinet.

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 40
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.
 Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 18
 Mystic Metal, " 08
 F. O. B. New York or Chicago.

MALLETS.

Tinsmiths', per doz. 1 25 1 50
 Carpenters', hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.

Cut Nails (Steel). Add 10c. to the prices in list for iron nails.

Wire Nails, basis, \$1.85 for carload lots Toronto, and \$1.95 for less quantities; outside points Montreal basis, with freight added. Terms, 4 months or 3 off and 30 days.

Brads and finishing nails, special sizes, 80 p.c. from new list.

NAIL PULLERS.

German and American, 1 85 50

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00

Diamond 12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.

OIL.

Canada refined oil (Toronto), 0 16 0 16½

Carbon safety " 0 18 0 00

Canada w. w. " 0 18 0 00

American w. w. " 0 00 0 21

Pratt's Astial, " 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross 1 00 4 25

" Carpenter, " 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis Mfrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range 1½ to 4. 100 00

No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.

Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 37½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

S.R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning, " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors', " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 0 17½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Boker's, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days

Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.

Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclusive, 65 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier, 65 p.c.

Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. cartoons, 1c. per lb. ex. h. boxes and

Burrs, iron or steel, 55 and 5 per cent. Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 6¼ 00 7½

¾ in. " 6¼ 00 7½

¼ and 5-16 in. " 7¼ 00 8½

Cotton " 15 17

Russia Deep Sea " 00 13

Jute " 6¼ 7½

RULES.

Boxwood, dis. 80 and 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

" N.P., per set. 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.

B. & A. sand, 40 and 2½ per cent.

Emery, per quire. 0 60 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.

Kempshell's, dis. 40, 62½ per cent.

Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

SAWS.

Crosscut, McMillan & Haynes, per dozen. 0 40 0 70

"Empire," McMillan & Haynes, per ft. 0 00 0 70

Hand, Diston's, dis. 12½ to 15 p.c. S. & D., 40 to 40 and 10 per cent.

Crosscut, Diston's, per ft. 0 35 0 55

S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 0 70 7 50

Whiting " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.

B. S. & M. Scales, 50 p.c.

Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50

Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50

Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.

Wood, R. H., " dis. 80 and 10 p.c.

" F. H., brass, dis. 82½ and 10 p.c.

" R. H., " dis. 75 and 10 p.c.

Diamond point wood screw nails, bright, dis. 77½ and 20 p.c.

Bench, wood, per doz. 3 25 4 00

iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.

B. & W., N.P., dis. 65 p.c.

Seymour's, dis. 60 p.c.

Etna, dis. 75 to 75 and 10 p.c.

Heinisch, dis. 80 p.c.

Bristol, japanned, 80 p.c.

" N.P., dis. 70 p.c.

Clauss, full nickel, 60 p.c.

japanned handles, 67½ p.c. off.

Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10

tinned, " 1 25 1 35

Tin rim, per doz. 2 30 2 45

black, " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.

Acme " 3 00 5 00

Lock, Andrews " 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English " 1 8 5 00

ron, American " 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross 7 50 12 00

Dessert, " 21 00 00 00

Table, " 30 00 30 00

Dessert Forks, " 24 00 00 00

Medium " 27 00 00 00

Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90

Steel, dis. 70 per cent., revised list.

Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized " 2½ 2½

Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb. 0 28 0 60

Hindustan, " 0 06 0 07

" slaps, per lb. 0 09 0 0

**PEARSON'S
PATENT**

Cone Rotary Ventilator



For Baldy Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2½ to 48 inches.

The Montreal Roofing Co.

Sole Manufacturers for the Dominion, Montreal

CHARLES F. CLARK,
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ESTABLISHED 1849.

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Executive Offices Proprietors.

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The Bradstreet Company is the oldest and, financially, the strongest organization of its kind—working in one interest and under one management—with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

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In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of **10 cents**

HARDWARE AND METAL, Toronto

Going to Retire? Want to Sell Out?

If so, say so in HARDWARE AND METAL. It reaches the most likely buyers. Two cents a word each insertion.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que.
Lac a lac Tortue.

Three Rivers.
Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

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Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

E. T. WRIGHT & CO.

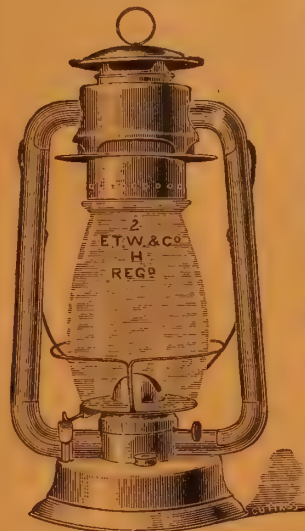
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Tubular and
Cold Blast
Lanterns

Bird Cages
Mouse Traps
Flour Sifters

Stamped
Re-tinned
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HAMILTON - CANADA.

The Hamilton Blast Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

HIGH GRADE PIG IRON.



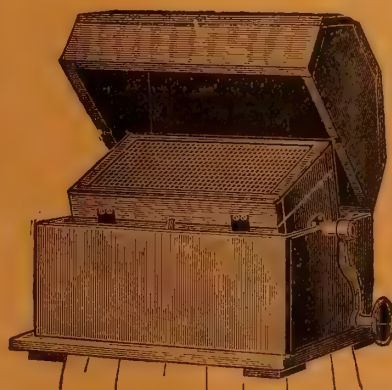
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to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.



Manufactured
by . . .

MEAKINS & CO.

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Black Diamond File Works

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Twelve

Medals

Awarded
By **JURORS** at
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Special Prize

Gold Medal at Atlanta, 1895

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WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

Can't Be Beat.

So say all who have tried

Robertson's Pure Prepared Paints

If you are not on our list and want to sell Paint that sells, send us a Trial Order. We will do the rest.

We make Varnish just as **good** as we make Paint. Our varnish maker has an experience of 25 years; he should know a little about it—don't you think so? Sample card for the asking.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, **Toronto**

Telephones 819, 1511 and 1292.

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Copper, Tin, Antimony, etc.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, NOVEMBER 6, 1897

No. 45



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

Beware of Fraudulent Imitations.

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.

MONTREAL OFFICE—

Caverhill, Learmont & Co.

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Owners and Sole Manufacturers,

266 and 267 West St., New York

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Advertisements for Queen's Head Galvanized Iron, written by practical iron workers. To contain not over 150 words, and to state one or more reasons, from practical experience, why it pays to use Queen's Head Iron.

Prize for Best Advertisement Five Dollars

Address.

Replies to be sent
not later than
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A. C. LESLIE & CO.
MONTREAL

Canada's Largest Radiator Manufacturers.

Cold Facts Choke Their Oratory.—Competitors who resort to misrepresentation when telling you about the "Safford" are often found out. It would make a horse laugh to hear some yarns repeated. The "Safford" needs no defenders. They are absolutely perfect in construction and low in price.

"Safford"

ARE THE ONLY PERFECT

Radiators

They are more expensive to make. They are, however, well made, and fully guaranteed—without a fault.

Leading All Others by Miles.

Made only by...

THE

TORONTO RADIATOR MFG. CO Limited

Toronto, Ont.



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Write for Price Lists and Discounts.

RICE LEWIS & SON (LIMITED)

Cor. King and Victoria Streets,

TORONTO

A Complete Lavatory

The cut shown illustrates our **Patent**

COMBINED BATH AND WASH BASIN



Hot and Cold Water Supplied to Bath and Basin.
Waste from Basin DOES NOT Discharge into Bath.

SEND FOR PRICES

The Toronto Steel-Clad Bath
and Metal Co. Limited.

125 and 127 Queen St. East, TORONTO

Keep a Little Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price.

NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP

Are you ready for the Fall
Trade in this line?



Patented 1898

KEMP MANUFACTURING CO.

Toronto

Bertram, Wilson & Co.

Having bought Bertram & Co.'s stock of Hardware (considerably under cost) we will sell the following lines (at reduced prices):

AXES- Dundas Edge Tool Co.

FILES- Toronto File Co.

SAWS- Burns Saw Co. and Disston Cross-Cut.
Disston and Bertram & Co. Hand Saws.

We can also offer the Hardware Trade at low figures—

Anvils, Vises, Picks, Mattocks, Crowbars, Machinists' Taps, Dies, Drills and Tools; Leather and Rubber Belting; Asbestos, Soapstone and Rubber Packing.

Letter Orders will receive Prompt Attention.

BERTRAM, WILSON & CO.

Iron, Steel, Hardware and Bicycle Merchants

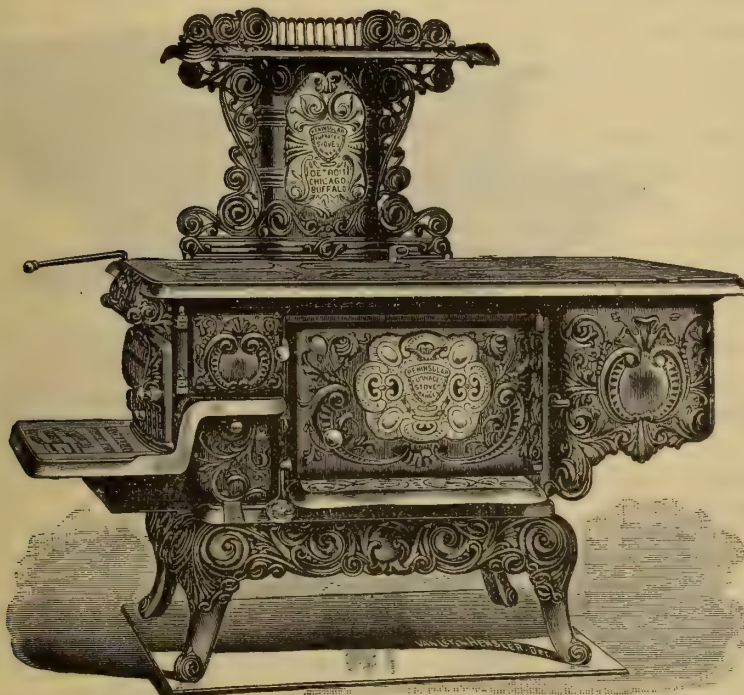
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TORONTO

Hardware Stock for Sale

A first-class Hardware Stock, including Bar Iron, Paints and Oils, with business in full swing, for sale at a rate on the \$ on invoice prices. For particulars apply to DINGWALL & ROSS, Port Hope, or to ROBERTSON & MacLENNAN, Barristers, Canada Life Building, Toronto.

NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new goods with same dress as the Granite Range, which is acknowledged to be the prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO.

PRESTON, ONT.

ALWAYS COLD.

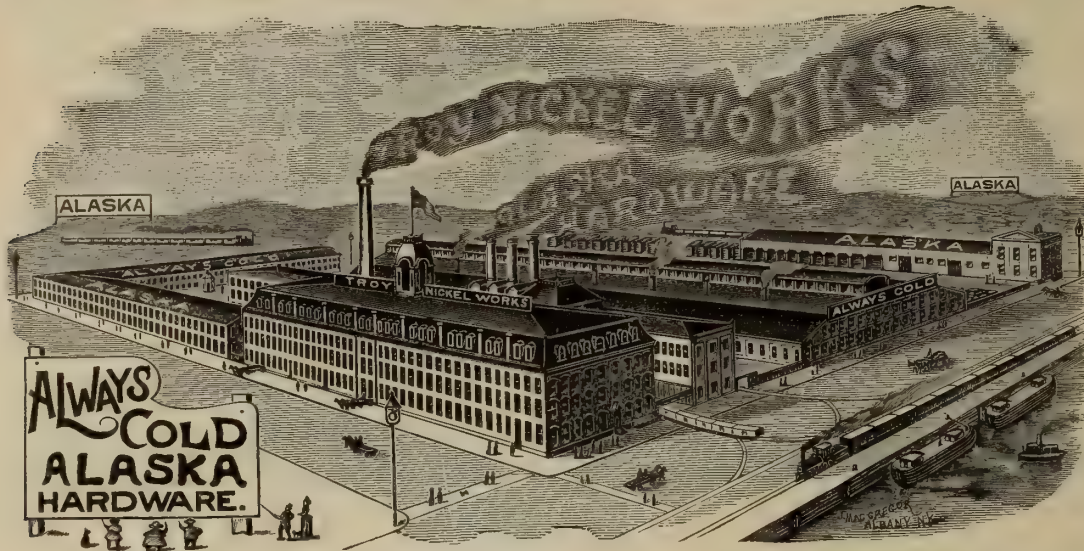
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc., Etc.



To Canadian Trade

If your Jobbers don't carry this line
send to us for prices. We will land
the goods at your door. WRITE US
ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

IN GREAT DEMAND.

OUR

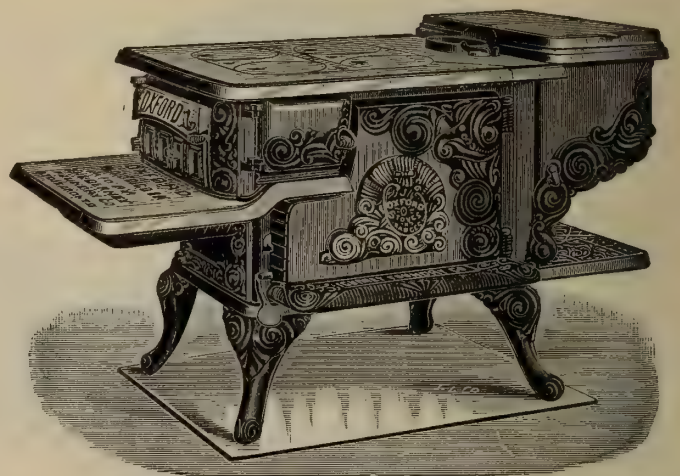
OXFORD

Wood Cook

is popular all over the country, where its merits
are highly appreciated.

Keep it in stock if you want to suit your
country customers.

It is a splendid working stove with a fine roomy
oven and large fire box. Supplied in 4 Sizes,
with or without the Reservoir and High Shelf.



OXFORD WOOD COOK EXTENSION

WRITE US FOR PRICE LIST.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



J. BAYNE MacLEAN, President. HUGH C. MacLEAN, Sec.-Treas.

THE MacLEAN PUB. CO.
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Major A. G. Campbell, General Subscription Agent.

GOODS FROM CONVICT-MADE IRON

NO decision, as far as can be learned, has yet been made by the Customs Department in regard to the importation of products into the manufacture of which convict-made Southern pig iron enters.

It is a question which cannot be ignored. The law prohibiting the importation of prison-made goods clearly states that "goods manufactured or produced wholly or in part by prison labor or which have been made within or in connection with any prison, jail or penitentiary," are to be denied admittance to the country.

Now, it is well known that convict-made Southern pig iron is used in connection with the manufacture of radiators and other articles which are imported into this country from the United States. Obviously, then, if these goods are wholly or in part made from such iron they have been made in connection with prison labor, and therefore come within the provisions of the Act.

The convict may not pour the metal into the mould which produces the radiator, but he produces the iron which the moulder transforms into the finished product, and

therefore assists in making, indirectly it is true, that finished product, radiator or whatever it may be.

ADVANCE IN WIRE NAILS.

THE long anticipated advance in the price of wire nails was made by the makers shortly after we went to press last week.

Wire nails are now costing jobbers 5c. per keg more at the mill than they did. The difference also between carload lots and smaller quantities has been reduced, so that carloads really cost 10c. per keg more.

Under the previous informal agreement arrived at in Montreal a few weeks ago, when the makers were discussing general matters, the minimum price at the mill was fixed at \$1.75, and jobbers were allowed a base price of \$1.80 on car lots with smaller quantities \$1.85 to \$1.90.

Now the minimum price at the mill is \$1.80, the car lot base is \$1.85, and small lots \$1.90. Therefore, there is only a difference of 5c. now between the price for car lots and the figure for smaller quantities, against 10c. under the previous arrangement.

One Montreal maker said he would not be surprised if a further advance was made shortly.

Practically all the makers except one concern were agreed that it was justified and legitimate under the conditions now governing the situation.

In spite of the advance there is still a difference of about twenty cents per keg between the price of wire nails in Canada and that of the laid-down price here of Pittsburg nails, duty and freight added,

BUSINESS MEN AND GOOD GOVERNMENT.

GOVERNING a country is no plaything. It is business. Real and earnest business if it is done right.

True it is often made a comedy, and a comedy of errors at that. But that does not alter the fact that the foundation of good government as well as of good business management is the employment of sound business ethics.

Government by the politicians for the politicians at the expense of the country is unfortunately the rule instead of the exception.

Under this deplorable state of affairs we see offices created for party heelers and party heelers appointed to responsible positions for which their qualification is not fitness but faithfulness to party.

No one political party has a monopoly in this respect. Conservative as well as Liberal and Liberal as well as Conservative are in the same boat. A blind fate seems to possess them both. They may differ in every other line of policy, but in this one thing there is no dissimilarity. And it does not matter whether it be in Dominion or in Provincial politics, all are characterized by the same inherent sin.

Theorists, ward-heelers, professional men, are, as a rule, the predominating parts which go to make up a government, whether it be of the Dominion or of the several provinces. And whether they would or not, they are not qualified to transact business on business principles. Partisan principles are the paramount underlying motive forces.

The leaven which shall leaven this lump of unbusinesslike governments, parliaments

and legislatures is the election to these parliaments and legislatures of a larger proportion of men endowed with practical business common sense. The duty of bringing this about devolves, of course, upon the practical business men of the country. And as this, what may be termed saving proportion, increases, the unbusinesslike legislation will naturally decrease.

It is not necessary that there should be a business party created. On the contrary, it is better there should be none. What is wanted is that business men throughout the country should sever the chains which bind them to their respective parties in order that as independent Conservatives or independent Liberals they may become a saving remnant and a guarantee for good government.

They have nothing to gain by being the servants of their respective parties in all their ramifications of evil as well as of good. On the contrary, they have a great deal to lose and the country a great deal to suffer by their so doing.

To follow party whithersoever it leadeth is a guarantee of the continuance of bad government.

Unbusinesslike government, bad government, cannot long continue where the business men speak through the ballot box as an independent business element and not as a unit in one or the other of the political organizations.

At the last Dominion elections, and later still, in the Quebec provincial elections, the business element was stirred up to independent action as it was never stirred before; and while it did much good, it might have done a great deal more good.

Before many months the business men in the province of Ontario will be given an opportunity of exercising their influence at the polls, for before next midsummer the present Legislature will have expired through lapse of time.

The determining influence which should guide every business man in marking his ballot is not whether the present Government should be retained in power or whether the present Opposition should remain on the Speaker's left: The determining influence should be, is the candidate a practical business man or is he a professional partisan like unto the average member which sat in the last House.

Good government is more to be desired

than party success, and the welfare of the country than a particular cause. But unless business men work and vote for practical business men to the sacrifice of party fealty the results will be the very opposite from those desired.

When a man goes into business he should go in for health as well as for wealth; for wealth without health is not worth much.

CHAINLESS BICYCLES.

SHOULD the chainless safety prove worthy of all the good things claimed for it and capable of standing up under the wear and tear that the chain wheel has weathered, not a few of the dangers, to say nothing of the vexations, attendant upon cycling, will have been done away with.

There is no part of a modern bicycle, as every rider knows, that requires more attention than the chain. The cyclist who has an eye to appearances, and who appreciates as well, the comforts of a smooth-running wheel knows the frequency with which a kerosene bath, a thorough cleaning with a stiff brush, and a final rub-down with a flannel cloth before applying a coat of graphite has to be applied. The same riders have also experienced the annoyance of losing a chain bolt, which loss, as a rule, occurs at a goodly distance from the nearest repair shop. Last, and fraught with danger of the gravest nature, is the not infrequent recurrence of the chain jumping the sprocket. This, of course, is most liable to happen when the rider is coasting and both stretches of chain are slack. Such a mishap is almost certain to ruin the wheel and throw the rider, the seriousness of results being determined more by the wheelman's good luck than by his presence of mind.

Of course, the danger of a properly adjusted chain slipping the sprocket is remote, but wheelmen are as prone to carelessness as any other mortals; and even the most careful are sometimes the victims, for chains will stretch and sprockets will wear with the inevitable result, should the rider fail to periodically examine and adjust his chain.

SMUGGLING IN MAIL BAGS.

ONE thing which every loyal Canadian must regret to see is the great number of sensational newspapers from New York, Chicago, Detroit, Buffalo and other points in the United States which are distributed every week in Western Ontario.

These papers are ever disseminating doctrines antagonistic to Great Britain and to Canada, and while they may make no impression upon the mind of the mature Canadian, it must be remembered that these same journals also fall into the hands of the young, whose minds are easily impressed.

It does not follow that all these young minds become imbued with anti-British and anti-Canadian notions, but where there is a steady bombardment week after week, year in and year out, it is certain that the national spirit is not strengthened any. And it is a strengthened nationality we need in this country. The opposite we cannot afford.

But the mail bags which bring this anti-Canadian literature into the country are, it is alleged, loaded besides with contraband goods, such as tobacco, etc.

No one, of course, charges the United States Government with being a party to any such practice, but it is gravely charged by merchants doing business in Western Ontario towns than those who handle these bags are.

One thing is certain: a great deal of laxity exists in the matter of inspection of these bags. The very fact that they come into the country in such great numbers induces superficial examination. The mail bags supposedly containing only United States literature are taking across from Detroit and Buffalo and bundled off at the different stations in a hurry; and it is the simplest thing in the world for confederates to carry on an enormous smuggling trade with the newspaper mail bags as their medium.

The Dominion Government should certainly investigate the charges regarding smuggling and in future establish a closer scrutiny of the newspaper mail bags coming from the chief centres of the United States, no matter how much or how little delay in the delivery of their contents may be entailed.

It may not be politic for the Government to stop the incoming of objectionable United

States newspapers into the Dominion, but it is its duty to see that bags which bring in this objectionable literature do not also contain contraband goods which injure the trade of the legitimate merchants and manufacturers of the country.

CENTRAL PRISON TWINE FACTORY.

THE petition which for the past couple of weeks has been circulating among the business men of Ontario asking the Provincial Government not to add a plant for the manufacture of rope to the Central Prison or to refit the binder twine factory at that institution recently destroyed by fire was presented to the Lieutenant-Governor-in-Council on Wednesday.

Although no distinctly organized effort was made to circulate the petition it contains nearly eleven hundred names, among them being the following: Charles Boeckh & Sons, H. S. Howland, Sons & Co., M. & L. Samuel, Benjamin & Co., Robert Kilgour, The Steele-Briggs Seed Co., Geo. A. Cox, Arthur B. Lee, Gowans, Kent & Co., Dovercourt Twine Mills Co., Aikenhead Hardware Co., T. Meredith & Co., Wheeler & Bain, John Leckie, George

Keith, H. P. Eckardt, James Kerr Osborne, B. E. Walker, Gurney Foundry Co., Toronto; M. B. Perrine & Co., Doon; Alexander Main & Sons, Hamilton; Hamilton Cotton Co., Hamilton; John O'Donohue, Mayor, Stratford; John Hogarth, Stratford.

It is to be hoped the Government will grant the prayer of the signatories. It should cause the Government no qualms to do so, for the making of binder twine has been anything but a profitable venture. It is hard to conceive of any branch of manufacture less suitable to a prison, unless it be the manufacture of rope, which the Government now propose to undertake. The cost of prison labor in the making of rope and binder twine is small compared with the cost entailed in the purchase of machinery and raw material. This, therefore, not only means the outlay of a good deal of capital, but competition of a particularly severe type with the legitimate manufacturer, who, if he is turning out his goods at a loss, has no other source to draw upon, as has the Government of Ontario with its timber limits, mining claims, etc.

The prisoners at the Central must necessarily be employed, but they should be employed in such a way that not only will the

return for the capital invested be larger than in making binder twine and rope, but that the minimum of injury may be done to the manufacturing interests of the country carried on by free labor.

The evil effects of the competition of prison labor are recognized in the Customs Tariff Act of the Dominion, there being a clause in that instrument prohibiting the importation of prison-made goods. And, if this principle is recognized by the Dominion Government, surely the Ontario Government should do all it can to minimize the evil, and not increase it by adding to the manufacture of binder twine the manufacture of rope.

SCREEN HINGES HIGHER.

A GOOD many orders are already being booked for screen door hinges for delivery next spring, but dealers are paying a great deal higher price than they did last season.

It is understood that the Canadian and United States manufacturers have arrived at some sort of an agreement whereby a uniform and higher price will rule.

The ruling wholesale figure now appears to be \$10.50 per gross pair, against \$7.20 last season, an increase of nearly 46 per cent.

THE ONLY WAY

to discharge an Iver Johnson Automatic Revolver is to PULL THE TRIGGER. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

DISPLAYING SMALL HARDWARE.

INTERESTING TO WOMEN.

THE advantage to be obtained by well arranged window displays of hardware cannot be overestimated in this day and age of excessive competition, says Stoves and Hardware Reporter. An immense amount of new custom is attracted and retained more frequently in this way than dealers, who do not give this matter sufficient attention, will admit. Most articles in the hardware line are especially interesting to women who find the process of fitting up a house a more agreeable task than that of selecting a wardrobe; therefore, all new appliances for facilitating and decreasing labor in the kitchen, for instance, are objects of great interest to women as well as men. Dealers from smaller towns may receive many valuable hints from city houses on the arrangement of these displays. It is a good plan to exhibit articles to be used in conjunction with one another rather than heterogeneous collections of goods for kitchen, dining room and parlor together. It gives the display more individuality if a harmonious color scheme is followed, which in this progressive age may render the kitchen as artistic and picturesque as any other room in the house.

DELFT BLUE VESSELS.

In kitchen utensils the delft blue and white ware has become quite popular. It possesses many attributes which render it superior in several respects to granite ware—among which may be mentioned that it is enameled on steel instead of iron, which makes it more durable and less inclined to rust where the enamel becomes chipped off. They are carefully finished in plain white on the inside of the utensils, and thus can be cleaned more effectively. A novel tea kettle in this ware, with double boiler in the top, has recently been placed on the market. The boiler may be taken out when desired, and the same lid serves for both kettle and boiler. Delft blue and white is undoubtedly one of the cleanest and coolest combinations of color for kitchen furnishings, and, though not within the reach of all, every woman aspires to the possession of a delft kitchen. A window display of all the different articles in which this ware is made would accelerate business to a marked extent, we believe.

PRICE MARK.

A great many dealers think that if the price mark is not on the goods in the windows that its absence will cause people to enter the store and make enquiries about it, and thus bring more custom than if the prices were conspicuously shown, but the truth is that if would-be customers can ascertain the price of an article which they fancy, the price often proves as great an attraction as the article itself. Many intending cus-

tomers will hesitate to step into the store and ask the price of something shown in the window, for fear it may be too expensive or beyond their means, and, besides, this proceeding takes time.

Right here it will be well to state what we have ascertained from observation, and that is that women are always fascinated by prices and the fond delusion of buying things at a "bargain" and "greatly reduced prices" never ceases to thrill them—and to be able, of their own sweet will, to compare prices with no insistent, impatient clerk standing by who reluctantly tells how much each article is worth is duly appreciated.

ARRANGEMENT OF WINDOW.

The tendency to crowd up the goods too much so that each article cannot be carefully inspected is a very bad plan and detracts greatly from the effect; if an extreme is followed it had better be on the one of too few instead of too many goods shown. Articles to be used in conjunction with one another should be shown together because each will facilitate the sale of the other—as, for example, a porcelain coffee pot and a coffee mill together, and tea pots and tea canisters, salt boxes in blue and white ware with spice cabinets and jars for holding sugar, coffee and rice, etc. In this way passers-by will readily see what they need and profit by the information.

DESIRABLE CUSTOMERS.

The most profitable customers beyond a doubt are people who are just starting to housekeeping. In them dealers in hardware find a rich harvest and if managed properly by an adroit clerk, a large stock may easily be sold them of articles and goods really necessary for their welfare. Many utensils which thrifty housewives try to manage without are yet indispensable requisites to a well kept kitchen. A meat chopper is one of them. It is used for such an infinite number of purposes that it would be difficult to enumerate them all from memory. Those who take an interest in cooking from a hygienic point of view will enforce this point on the customer's notice also. The up-to-date meat choppers are a great improvement on the old style ones, as they may be taken to pieces completely and cleaned and, as all parts are interchangeable, when one wears out it can easily be replaced with a new one. The cutting parts are of steel, which is better than iron for this purpose.

Of asbestos plates, toasters and contrivances for mashing potatoes more quickly, as well as all the various grinders in which improvements come out all the time, there is no necessity to write in detail. All up-to-date dealers should keep these in stock and let people know where to find them by

the aforementioned effective window displays.

FREQUENT CHANGES.

We would advise frequently changing the dressing of the windows. People soon get tired of looking at the same thing and pass it by unnoticed, whereas a new arrangement of some unique and attractive goods holds attention and brings custom while at the same time giving the store prestige over competitors. By all means study competitors' methods and endeavor to differ from them as much as possible without being abnormal or conspicuous in an undesirable way. Originality in execution and arrangement of window trims is difficult in an advanced age when there is nothing new under the sun. Inventive genius is almost as rare as the traditional hen's teeth, and the old adage that poets are born, not made, might almost apply to window trimmers also; but much knowledge may be acquired by honest endeavor in this line as well as any other.

HAMMERED LEAF IRON WORK.

There has been so much talk about "better times," "the new conditions of trade," etc., that one begins to think these phrases to be somewhat worn out. Yet on every hand there is some improvement, some new development of trade. One of the latest developments that has come under the notice of *HARDWARE AND METAL* is the opening up in Canada of an old class of wrought iron work which has hitherto been imported when wanted.

The Toronto Fence and Ornamentation Iron Works have erected in the North American Life Assurance Co.'s building on King street, Toronto, the staircases in wrought iron work, and are now engaged on ornamental grills for the front door of that building. These grills will be hammered leaf work, with a 16th century bronze finish, and will be wrought by hand throughout. The hammered leaf work is a wonderful product of the anvil and hammer, and is exciting much interest among the architects who have seen the work.

This company have just finished a bank rail for Simcoe, Ont., and office rails for the Montreal Court House. During the past month they have shipped goods from Halifax to Vancouver.

A THRIVING HARDWARE BUSINESS.

A representative of *HARDWARE AND METAL* recently dropped into the hardware store of Hugh MacLaren, jr., Port Elgin, Ont. This business was formerly carried on under the style of MacLaren & George, the present proprietor having become the purchaser some time ago. As under the old, so under the new, the business continues to thrive.

THE CASH REGISTER AND ITS DEVELOPMENT.

MUCH is heard in these days of the development of the telegraph, the telephone, electric lighting and various applications of electricity. None the less interesting is the story of the development of the cash register, which has become, in these days, almost an indispensable part of a merchant's equipment.

Some 12 or 15 years ago, the first cash register, in crude form, was shown to merchants. It originally consisted of a dial, showing two sets of figures for dollars and cents, and registering the amounts by the pointing of the hands of the dial. This was very crude, but was used by many merchants, because it was a decided advance upon the old methods of business.

The next step in invention was a paper strip, ruled in columns corresponding to definite amounts of money, which were indicated on the keys of the register. These keys, when pressed, punched holes in the columns. It was necessary, to find the total of the day's business, at the close of the day to take from the register the strip of paper, count the number of holes in each column, multiply by the amounts represented by the columns, respectively, and then add the totals of these different columns.

Following this came the wheel register, in which the keys, when pressed, turned the wheels for each denomination. As they revolved they indicated the number of times each amount was sold. In order to find the total, the amount represented by each wheel must be multiplied by the number of sales indicated on the wheel and then the separate quantities must be added together. The next step in invention was to indicate on each wheel the actual total of the sales of that denomination. At a glance the operator can tell how much has been added on each wheel. These amounts must then be combined in order to obtain the total of the day's business. This machine is the detail-adder, so well known among merchants, and is still made. It served an excellent purpose, and was a very great improvement on all previous methods in retail business.

However, like the earlier telegraph and telephone, the detail-adder was satisfactory only for a time, because there was nothing better. Some merchants still use it, but with nearly all wide-awake dealers, both in the United States and Canada, it has become a back number, and has given way to the later invention of the total-adder. This register, upon pressing the keys, adds into one amount all the sales of the different wheels. As a result, the total of cash receipts at any hour of the day may be seen at once. Special transactions, such as

Two Years Ago

on the first day of November we began making
THE SHERWIN-WILLIAMS PAINTS in Canada.

We have done very well here during that time—this year we are only a little short of **doubling** the sales of our products over last year.

We have demonstrated beyond a doubt that there is a market here for the very best grade of paints; that a firm making only one grade—the very best—can do a prosperous business here.

In most cases we have helped our dealers to increase their paint business. We can do it in **every** case where a man will take hold with us and use intelligently our methods for getting more business. Our methods get the business—our goods hold it and increase it.

If you want to reap all the benefits from the good times that are now here, you ought to be handling our goods and getting the advantage of our business methods.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

money paid out, money changed, money received on account, etc., are also taken care of by this register.

The latest development, however, is the register which combines the total-adder with the detail-printer and check-printer, giving a most excellent opportunity for complete system and for special forms of advertising, as well as showing a full history of the day's business.

The advantages of registers of this class are that they add into one total all the sales made during the day, print a check showing the amount of the sale, as well as the date, consecutive number, clerk's initial and proprietor's card, tell how many sales have been made each day, keep each clerk's sales or the sales of each department separate, take care, in the same way, of credit sales, money paid out and money received on account, tell at what time in the morning the store was opened, and print on a strip of paper inside the register, under lock, a complete, detailed record of each transaction as it occurs.

These late developments of the cash register are remarkable for their precision and comprehensive character. The merchant who desires to keep pace with the system and business of to-day is no longer

satisfied with the detail-adder, but finds necessary, for the most economical conduct of his business, the latest style of total-adder and check-printer. The various improvements made have placed the detail-adder far in the rear, so that the detail register that formerly cost \$150 or more is now supplemented by one that will do the same work satisfactorily at a cost of \$50 or \$60.

These steps in the development of this important adjunct to good business show the advancement of invention as fully as do the more frequently heard of improvements in the application of electricity.

NICKEL PROPERTY SOLD.

Mr. Gibson, secretary of the Bureau of Mines, has returned from Sudbury, and brings back a report to the effect that a nickel property belonging to Mennie, McVittie & Jackson, of Sudbury, has been sold for \$90,000 to a syndicate composed of two Chicago men and Mr. F. H. Clergue, of Sault Ste. Marie, Ont., pulp and paper manufacturer, who intend to treat the ore at Sault Ste. Marie, and to produce sulphuric acid from the sulphur extracted from the ore. The sulphuric acid will be used in the manufacture of pulp and paper.

A U. S. TRIBUTE TO CANADA.

LAST week's issue of the New York edition of Bradstreet's has an interesting article in regard to the trade condition in Canada. In part it says:

It was pointed out in Bradstreet's last week that general trade in the Dominion of Canada is relatively more active and has made a proportionately greater advance since the beginning of the recent revival than business in the United States. This will prove in the nature of a surprise to those who have continued to look at affairs in the Canadian Dominion as of the slow-coach variety. But so pronounced is the revival, not only in agricultural but in commercial and industrial lines throughout the Dominion, that business men, merchants and bankers are confidently predicting an era of prosperity greater than they have ever previously experienced. The wheat crop of Ontario, like that of the United States, is large, but is relatively more satisfactory than here, as it is the largest in the history of the province. The higher price for wheat, coming in conjunction with the large crop, has done quite as much for the Canadian as for the American farmer, and the movement of grain from the Dominion to the mother country has been relatively quite as rapid as from this country. This has resulted in a marked increase in the demand from country storekeepers throughout the Dominion and has reflected that revival in almost all lines of trade, causing even an increased request for real estate. The Toronto correspondent of a London newspaper remarks that values of city property have advanced, that not only the Canadian Pacific Railway but other land corporations report large gains in the number of sales of far-off property in Ontario and even as far away as in Manitoba and the North-West Territory. Canadian bank statements in the early fall months are declared to have been the best for many years and their note circulation the largest for five years. There was also an increase in bank deposits, and balances due Canadian bankers from the United States, where the former loan large sums of money to aid in the movement of the crops, were \$12,000,000 larger in September than in August, and if there were anything further needed to show that general commercial demand in the Dominion had risen to a high level, it is found in the statement by dry goods dealers and others that there has been a heavily increased movement into consumption of kid gloves, silks, satins, velvets and pianos.

Coming from a United States publication the article is most significant. It is, as a rule, odium and not praise we get from newspapers across the border, and Bradstreet's has fully earned the thanks of the business men of Canada for presenting the truth in so pleasing a form.

GAME AND FISHING LAWS.

HARDWARE AND METAL has received a copy of the digest of the Game and Fishing Laws, by A. H. O'Brien, M.A., assistant law clerk at the House of Commons. It is a complete epitome of the provincial and Dominion law affecting birds, animals and fish, alphabetically arranged, and giving references to the different statutes and orders-in-council now in force. It is a thoroughly standard and reliable work, having been issued under the authority of the Ontario fish and game commissioners, and should be in the hands of every sportsman

and fisherman. It will be sent post free for price, 25c., on application to Mr. Geo. Renardson, 74 Church street, or the Canada Law Journal Co., Toronto.

EXCELLENT HOCKEY SKATE.

HARDWARE AND METAL this week prints a cut of the "Union" hockey skate, made by the Union Hardware Co., Torrington, Conn. This firm has been in the skate manufacturing business for 41 years, and is now said to be the largest producer of these goods in America, if not in the world. Its output this season will reach about three-quarters of a million pairs of skates of all kinds.

It has gone to much expense and spent much time in learning the requirements of hockey players, and has been successful in introducing this skate among the leading clubs and dealers in Canada.

As will be seen by the cut, this skate is beautiful in design, and is of the right height to allow cutting of corners at speed.



It is extremely light in weight, but the superior quality of steel used guarantees its strength. All plates are made of homogeneous open-hearth steel, and the rivets and braces are of soft Swedish steel, the best possible material.

The plates take the sole of the boot properly, and the blades are straight at bottom, thus giving the greatest strength and power with the least strain. Proper relief is given at toe and heel to allow for roughness of ice and turning.

The Union Hardware Co. manufactures the "Union Club," the "Union Club Special," the "Keene" and the "Long Reach" skates, the last two being made under Whepley's patents, which the company owns. It also manufactures for the Canadian trade the following lines: leather goods, steel loading tools and gun implements, mallets, handles and wood goods, tackle blocks, drop forgings, roller skates, etc.

Wholesale dealers and jobbers throughout Canada should have this company's catalogues. Note its advertisement in this issue, and refer to HARDWARE AND METAL when writing the firm.

The Mackenzie Steam Navigation Company, head offices in Winnipeg, will put a through connection of three steamers on the waters of the Mackenzie in time for next season's trade via Edmonton.

DIE-SINKING BY ELECTROLYSIS.

A process for the sinking of dies by electrolytic action has been invented by a Mr. J. Rieder, of Thalkirchen, near Munich. According to the inventor it is likely to be of great practical value, not only in sinking dies for coins and medals, but also in the manufacture of stamp-designs for tin goods, small metal goods, leatherware, book-covers and printers' blocks. The process may be summarized as follows: The design is moulded in relief upon the end of a plaster of Paris cylinder about two inches or more in length. This roll is enclosed in a coating of vulcanized rubber and placed in a vessel containing a suitable electrolytic medium, such as chloride of ammonium, the lower portion of the roll being immersed in the liquid, while the end containing the relief sticks out from the vessel. A spiral wire connected with the negative pole of an electric battery is then inserted into the medium, while a steel disc, connected with the positive pole, is placed upon the relief. The plaster of Paris roll

absorbs the liquid from the vessel, and the electric action which is set up bites away the steel wherever the face of the metal disc touches the plaster, so that a die is thus cut out on the steel. The weight of the disc causes it to sink into the roll, and gradually all parts of the disc are brought into contact with the plaster of Paris. The die is then ready and the current switched off. The inventor uses a current of 0.2 to 0.5 amperes per square centimeter of surface. A good deal of trouble has been experienced with the carbon present in the steel, which does not dissolve, but forms a fine black deposit on the face of the relief, necessitating the removal of the steel disc every five or ten minutes for the purpose of cleaning it, after which, the disc has to be replaced with the utmost care. Mr. Rieder is now said to have invented a means of automatic cleaning which will enable the process to be performed much more rapidly, and put it in the power of one operator to attend to several dies at a time. At present, it takes about three hours to engrave a design of the size of a sovereign.

BERWICK & CO.'S NEW STORE.

E. Berwick & Co., general merchants, Shelburne, Ont., have moved into their new store on the front street. The store is one of the finest in the northern district, and is up-to-date in all the essentials to the carrying on of such a business as that of Berwick & Co. The store is lit with electricity, and an excellent system of cash carriers has been put in. Berwick & Co. are to be congratulated.

H. S. HOWLAND, SONS & CO.

Wholesale Hardware
Merchants

37 West Front
Street, TORONTO



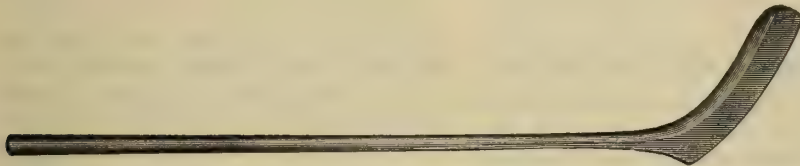
HALIFAX PATTERN SKATES

Large Assortment
All Sizes, 7 to 12½ inches.



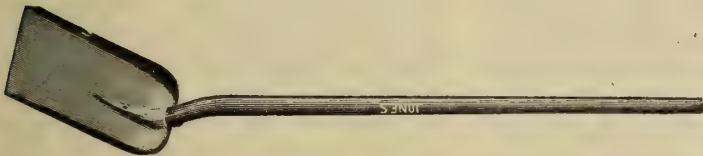
HOCKEY SKATES

Large Assortment
All Sizes, 8 to 12 inches.

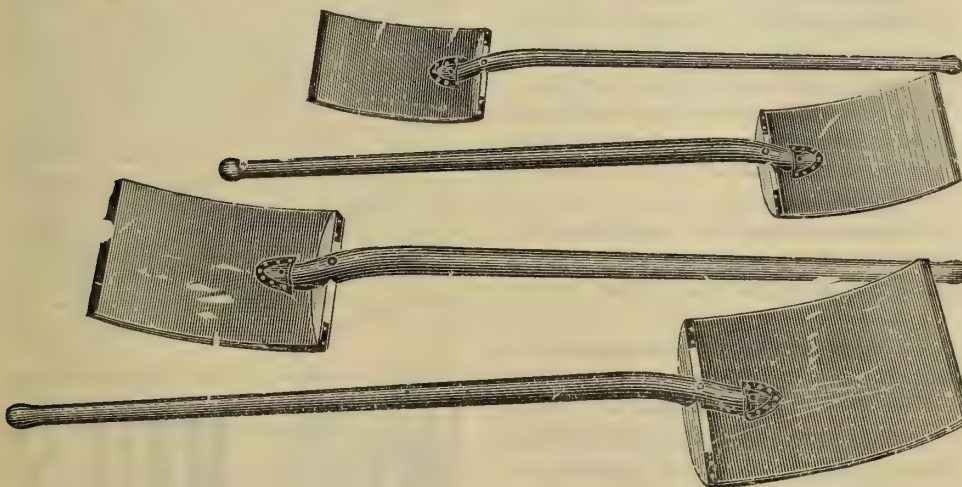


HOCKEY STICKS

All Qualities.



STEEL SNOW SHOVELS



WOOD... SNOW SHOVELS

"Favorite"

All Sizes.

Graham Wire and Cut Nails are the Best.

H. S. HOWLAND, SONS & CO. - TORONTO

Orders Filled Promptly.

Our Prices are Right.

AN EXTRAORDINARY BLUNDER.

THE ignorance which abounds in Europe in regard to the geography of Canada and the flag to which the country owns allegiance is astonishing. Even in Great Britain, the parent state, grave mistakes are sometimes made in matters of this kind. The following cut, a reproduction of an envelope handed to **HARDWARE AND METAL** by a subscriber, is an ocular demonstration of this: There is no Lord Mayor of Ontario. In fact there are no Lord Mayors on this continent. We have mayors. Owen Sound, Ontario, has a mayor. His name is T. I. Thompson, and when he is not attending to his municipal duties he sells hardware. Into his hands the letter fell. It bears the postmark of "Birmingham, July 12, 1897," and was from a lady in that well-known city who desired the "Lord Mayor of Ontario, Owen Sound, Canada, U.S.A.," to supply her with certain information regarding certain real estate.

Judging from the chirography, the writer of the envelope had been taught to use the pen, but not the book of geography, even of the British Empire.

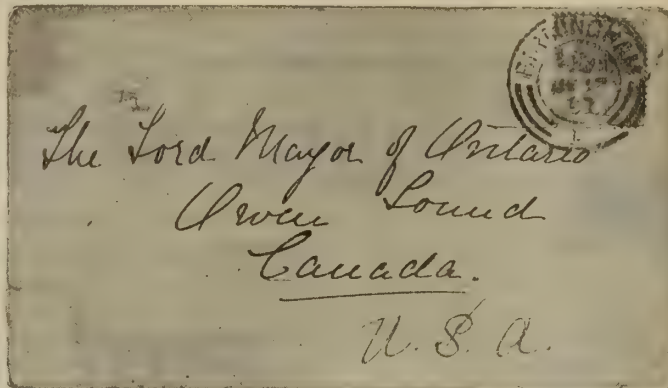
Alas! alas! And is that all the preferential tariff, the visit of Sir Wilfrid Laurier and the Canadian troops to Great Britain has done for Canada? Talk about a father not knowing his own child, this doubly discounts it.

In the event of this reaching the eye of someone sitting in the same darkness as the Birmingham lady, we beg to remind them that Owen Sound is a town in the province of Ontario, that Ontario is a province in the Dominion of Canada, that Canada occupies the bigger half of the North American continent, covering an area of 3,456,383 square miles and is the greatest of the British colonies and not a part of the United States.

ROUNDHOUSE FOR SARNIA.

It is a source of much gratification to all concerned to know that the roundhouse question has been finally disposed of, all the papers and agreements between the town and Grand Trunk company having been signed, sealed and delivered, and the work of construction will likely proceed forthwith. The original proposition stated that within thirty days from the time the agreement was signed work on a thirty-stall \$65,000 roundhouse and necessary shops would be commenced, so that if this program is carried

out the work of construction will soon be well in hand, and no doubt within the next three or four months there will be no more use for the Point Edward roundhouse and shops. The location of the new roundhouse will be almost opposite the south end of Spragge street. The east end of the building will be almost on a line with the west



line of the street, and extend toward the west and south, allowing for the laying of a number of additional tracks between the building and the present tracks.—Observer, Sarnia.

COAL MINING IN THE NORTHWEST.

W. H. McNeil, managing director of the Anthracite Coal Company, arrived in the city from the west yesterday and proceeded on the outgoing Atlantic express to Montreal. He had been at the mines some weeks, directing the operations to empty the Anthracite pits of the water that had flooded every crevice during the freshets in the mountains last spring. Pumping was kept up continuously for four months, from June 15 to the middle of October, and in that period 30,000,000 gallons of water were drawn out, a tonnage equal to the total of coal, rock and slate taken out of the mine during the previous six years. Mining operations have been resumed and will be running to full capacity early in November. The Canmore mines are now being operated and turning out 10,000 tons per month, and the capacity of the Anthracite mines will be 3,000 tons per month. Speaking of the effect of the flood on the supply for the ensuing season, Mr. McNeil said no inconvenience would be experienced in Winnipeg to supply the demand, as a quantity had been in store here, but in Brandon and other points the supply in hand was diminishing. New shipments, however, will be made as soon as possible from the mines, and he was hopeful of being able to place sufficient quantities at all points in time for the winter supply.

"There is quite an army of men working at the coal mines," continued Mr. McNeil, "some 500 in number, and the monthly expenditure for provisions, clothing, and

other articles, which aggregate from \$15,000 to \$20,000 a month, is a factor in maintaining the prices of farm products in the west. The tone in the west is very confident and hopeful, both among merchants, ranchers and farmers, who realize and acknowledge that coal mining, as well as the development of the gold industry, is aiding in increasing a profitable home market."—Free Press, Winnipeg.

COAL HANDLING PLANT.

IN the handling of coal from cars to boats on the great lakes much difficulty has been experienced owing to the fact that the handling plants have been built in such a way that there is much loss from breakage of coal in the handling.

The Brown Hoisting & Conveying Machine Co., of Cleveland, Ohio, have built five machines which are quite new in their construction and method of operation, and which are calculated to reduce to a minimum the loss through breakage of coal, while moving the coal from the cars to the boats.

The method of operation is to have the coal cars run in on a track under the machine, when a tippie is clamped over it. The car is then canted on its side, when the coal runs into six pockets which turn over into six buckets. When the coal is all in the pockets they automatically open and the coal falls into the buckets. These buckets are placed on three cars, six on each. These cars run on a track underneath two large travelling cranes, each of which lift the buckets one at a time and carry them out and down into the hold of the boat. where, when the bucket is within a few inches of the floor or coal pile, it is automatically unclamped, reducing the risk of breakage in the fall of coal to a minimum.

The plant can be run by a staff of ten men, and the expense in connection with the running of it, including depreciation of plant, wages, fuel, oil, waste, etc., will amount to about \$40 a day. As the handling capacity of the plant is from 3,000 to 4,000 tons per day, it will be seen that the average cost of handling coal from car to boat will not be much over one cent per ton.

WIRE NAILS

WIRE - TACKS

Ontario Tack Co.

HAMILTON

TRADE CHAT.

MR. J. LONGPRE, the well-known and popular assistant of J. P. Beauchamp, general merchant, has, we understand, decided to enter business for himself at Lebrét about the 5th of November.—Progress, Qu'Appelle.

The coal mines at Canmore, N.W.T., are now producing 10,000 tons per month.

The Windsor Foundry Company, Windsor, N.S., has secured temporary premises and will thus be able to continue business.

The Halifax Electric Tramway Co. are putting in a new Robb 400 h.p. engine and in a couple of days will put in two 5,000 incandescent light dynamos.

The Tilsonburg, Erie and Pacific Railroad is constructing a connection at Tilsonburg with the M.C.R., and will build a \$20,000 steel bridge across the Otter Creek.

Mr. J. H. Munro, of Munro Bros.' wire works, New Glasgow, N.S., has gone on a trip to the old country to gather some new ideas for use in their business. This growing firm intend to be abreast of the times.

It is stated that the Keewatin Lumbering & Mfg. Co. purpose closing down their mill at the end of the present week. They have had a busy season and the sales have been largely in excess of those of any previous year.

The new proposition for a smelter for Vancouver was lately submitted at a Council meeting by J. H. Rothschild, of London, Eng. He offers to erect a 200-ton smelter for a bonus of \$65,000, payable at the rate of \$1 per ton.

The Blenheim correspondent of The Chatham Banner writes: "Our merchants are receiving the largest and finest stock this season that Blenheim has ever had, and we bespeak for them the most successful fall and winter trade."

The Highgate correspondent of the Chatham Banner says:—The business stir in our village is very brisk. Every line of business now represented is steadily prospering and all that is needed to give us full representation is a better accommodation.

The Minnesota and Winnipeg Lumber Co, with a capital of \$5,000,000, intends erecting saw mills in Winnipeg. The company is composed largely of Canadian capitalists. Senator Buckman of Minnesota, is president of the company.

When the Grand Trunk Railway Co. built the car shops at Brantford they got a bonus of \$32,500, and when the shops were removed the city made a claim for that amount and entered suit for its recovery. The Special Railway Committee authorized the Mayor and City Solicitor to offer to withdraw the suit on condition that the

company repaid the bonus back, with interest. On Wednesday the Mayor got a cheque for \$32,500, and another for \$1,000 for interest and costs. This disposes of the entire matter.

J. B. Laing soon intends opening out a hardware store in the building formerly occupied by Laing and Meharry, Port Perry. As all the old stock was bought by R. J. Bruce, Mr. Laing will show a brand new stock of everything in the hardware and iron line.

A piece of string, a little sand, and a little grease seem somewhat inadequate tools with which to cut in two an iron bar two inches in diameter. Yet, according to The Pioneer Mail, this was the feat accomplished by five Indian convicts, who thus effected their escape from gaol. Experiments made afterwards by the officials showed that five hours was sufficient time for the task.

Canadian Pacific land sales for the last month amounted to \$86,000 for 22,000 acres, more than twice the amount for the corresponding month of last year. Canada Northwest Land Co. sales for the month realized \$19,000, and for the year 1897, up to October 31st, the sum of \$150,000 was received for about 28,000 acres. Last year's sales were only 12,000 acres for \$67,000.

An electric rat trap is said to have captured 123 rats in one night in a New York restaurant. The trap is baited with chickens—an irresistible attraction to rats. As soon as a rodent is inside his return is electrically cut off, and he passes, by doors and passageways to a compartment in which are meat and vegetables, but no chickens. The rats outside hear expressions of enjoyment of his lunch, and hasten to join him.

A citizen called up the office of one of the gas companies on the telephone, and of the clerk who answered the call he asked: "When do the entries for the spring races close?" "You have the wrong number; this is the office of the — Gas Company," replied the clerk. "That's right! I want to know when the entries for the spring races close?" "What do you mean?" "I want to enter my gas meter."—New York Evening Sun.

IRON SHIPBUILDING AT HALIFAX.

The Atlantic Weekly published the following letter, signed by "E. M.," a few days ago:

A writer in an evening paper comments on the great change that has taken place in the shipbuilding yards of our province, which has been in past years one of our principal industries; but now that the building of wooden ships has become a thing of the past, the men who fashioned them have departed for foreign lands, and the place that knew them once, will know them no

more. Now as we are essentially a maritime people and require ships to carry our products to other lands why should we not turn our attention to the construction of iron and steel vessels? We have the crude material in abundance which only requires the skill of the miner and iron worker, with the aid of the rolling mills to form it into proper shape for ship building and other purposes. The construction of steel ships in our country cannot be long delayed, and now is the time to put our shoulders to the wheel and go ahead with this great industry, which will give employment to hundreds of our idle men who will by this industry be kept at home. There are several good sites for a building yard in Dartmouth or Halifax side of the harbor, which can be obtained at a reasonable cost, and the whole plant will not cost over \$150,000. As there is a great and increasing demand for steel plates for boilers, a large and profitable business can be done in the manufacturing of this article alone.

The plant for building steel and iron ships is the principal outlay in establishing this industry. The rolling mill comes first; this part of the plant, however, may not be necessarily owned by the shipbuilding company, as in the old country it is an independent business, and supplies the shipbuilders with the rolled material, but the mill in the first inception of the business will have to be provided by the company. In regard to the crude material for the first year or two to keep the mill going there are thousands of tons of wrecked steel plating lying around our coast, which could be utilized, and would be delivered in Halifax for about \$8 per ton. This material is now going to waste, for the want of a market. At the present time there is a small rolling mill at work in Dartmouth, making bolt and bar iron; the demand is greater than can be supplied. Now if Halifax is ever going to bring prosperity back to our harbor and city, we must move in this matter without delay and organize a steel shipbuilding company.

PROFITS ON PIG-MAKING.

It may be generally supposed that hematite-iron makers should be doing an excellent business at present, with East Coast mixed numbers at 49s. 6d. and hematite warrants at 47s. to 48s. Such, however, is by no means the case where raw materials have to be purchased in the open market. The following figures show the probable cost of making a ton of Bessemer pig on the East and West Coasts, at the prices current of to-day:

	Cleveland.	West Coast.
	£ s. d.	£ s. d.
Iron ore (2 tons).....	1 10 0	1 11 6
Coke (1 ton).....	0 13 3	0 18 9
Limestone	0 1 3	0 1 3
Labor.....	0 2 6	0 2 6
Totals.....	£2 7 0	£2 14 0

These figures do not provide for depreciation, interest on investment and other items that should be taken into account, and which, when added, would probably leave the producer who has to go into the open market with a balance on the wrong side.—Iron and Coal Trade Review.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

THE DISCHARGE CLAUSE.

IN each of the attempts which have been made to introduce a Dominion insolvency law the discharge clause has proved a bone of contention; and in the attempt which in all likelihood will be made at the next session of Parliament there may be expected a repetition in this respect.

Practically everybody is agreed that there should be a discharge clause, but it is not everybody who is agreed as to the ways and means of the insolvents obtaining it.

When the last insolvency bill was before the House the bankers contended for 66⅔c. on the dollar as the amount an insolvent should pay before he could be entitled to a discharge, but the Senate fixed the amount at 50c. on the dollar.

It seems to us that a fixed statutory amount should only be embodied in an insolvency law after the most careful consideration and after it had been demonstrated that the best net results would be thus obtained.

The object of a discharge clause is chiefly two-fold: (1) to relieve honest but unfortunate insolvents from the burden of their misfortunes, and (2) to prevent dishonest insolvents from again resuming business in their own name.

To fix, however, the amount which shall be paid in order to obtain a discharge would often shut the door against a worthy case and open it to an unworthy.

A merchant who is honest, capable, but unfortunate, and who has surrendered all his assets to his creditors, is entitled to a discharge even if he is unable to pay twenty-five cents on the dollar. To keep such an one in bondage is only differing in degree from the now obsolete custom of putting a man in a debtors' prison until he was able to liquidate his liabilities.

On the other hand, fifty cents on the dollar, or any other fixed sum, would be no obstacle to the insolvent who failed designedly. Before he failed he would have provided the wherewithal for his discharge. A

rogue fails in order that he may make money.

The more we are inclined to study this particular question the more are we inclined to the belief that the amount an insolvent shall pay should not be fixed by statute.

Of course, it would not be advisable to make the way of escape from the consequences of insolvency too easy. That would induce insolvency, and the last state might possibly be worse than the first. When a merchant finds himself in a tight corner financially it is better that he should exert himself to get out than he should passively allow himself to be squeezed into insolvency because of the knowledge that it would be the easiest way out of his difficulty.

But because the statute did not define the exact terms upon which an insolvent should get his discharge it does not necessarily follow that the demands upon him should be less onerous than if there was a statutory amount fixed, while, on the other hand, it is certain they would be less likely to be unduly irksome to the honest but unfortunate insolvent.

Let the matter of a discharge be first of all delegated to the creditors for consideration. After a careful investigation of the estate they would be the best qualified to determine the amount an insolvent should pay, or if he was entitled to a discharge under any condition whatsoever, even if he paid 90c. on the dollar.

Just as creditors now sometimes agree to a compromise when they should not, so in all probability would they sometimes agree to a discharge when they ought not. But eventualities of this kind could be guarded against by the question of a discharge being finally referred to the judge for adjudication.

Fixed statutory amount or no fixed statutory amount, the granting of a discharge should not be finally left in the hands of the creditors. To do so would sometimes result in justice being laxly administered in one instance and too rigorously in another.

Spite and leniency are frequently in evidence at meetings of creditors, and therefore such a court cannot be said to be always qualified to mete out justice.

ATTRACTIVE LAMP DISPLAYS.

One of the best articles with which to make a tasty window, if the dealer has a good variety, is the lamp, with all its differentiations of size, shape and color.

A beautiful effect is created by following in some such lines as are herein suggested. Table lamps are placed on a stand, low and tall alternately, of all prices, special care being taken in the harmonious blending of colors, etc. The side of the window is arranged with shelves holding hand-lamps of different kinds, and with wall lamps between the shelves. From the top are suspended hanging lamps of every description. A few fancy colored silk shades hung to show in good positions heighten the effect of the scene very considerably. To make such a display a business-getter as well as a scene of beauty, every care and attention should be taken with the tickets, giving description and price of goods.

IN THIS BICYCLE AGE.

"Gentlemen," said the political candidate, "my record is an open book. There is nothing in it that I am ashamed of. Though I have passed beyond the point which the great majority of men fail to reach, I am not proud. I started as a poor boy, and have come up through all the various walks of life to——"

"Walks of life? Walks of life?" broke in the assembled bicyclists; "this man talks about coming up through the walks of life, and then asks us to vote for him! Down with him! Tar and feathers! Somebody get a rail!"

The candidate escaped by jumping from a second-storey window, but he never stopped to learn whether he was beaten at the polls or not.—Cleveland Leader.

ROOFERS, ATTENTION !

Galvanized Iron Roofing Felt
Solder Pitch
Sheet Copper Slating Nails

Enquiries for prices and brands solicited.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

A FIRE INSPECTOR

reports that more policies covering mills, warehouses, etc., are cancelled by reason of lack of fire pails than by any other reason. And yet it costs so little to equip premises with indurated fibreware round bottom fire pails made by



The E. B. EDDY CO., Limited

HULL, MONTREAL and TORONTO.

AMERICAN HARDWARE IN CANADA.

A LEADING Wolverhampton firm has, I learn, just received an interesting and instructive letter, bearing upon American competition in the Canadian hardware trade, from one of their travelling representatives who is now on his way to Japan. It again tells the old, old story, and one of the first reasons adduced for the capture of the Canadian market by United States dealers is said to be the better methods of packing hardware which are adopted by the Americans. The writer further states that a United States quotation for any given article in hardware is almost invariably accompanied by a note as to the quantity in a case, with measurement and weight thereof. In this way the percentage of cost of freight and charges on any given class of goods can be figured out to a fraction. This, in contrast with the English merchants' old-fashioned way of packing a heterogeneous lot of hardware, mostly wrapped in brown paper parcels, some of them, for illustration, worth, say, 1s. an ounce and some only 1s. a pound, all in one huge hogshead, for which a separate charge is made (a very sore item this), rendering the correct apportioning of the freight and charges throughout the various classes and values contained in the one hogshead a long and laborious, if not even an impossible, task. The writer adds:

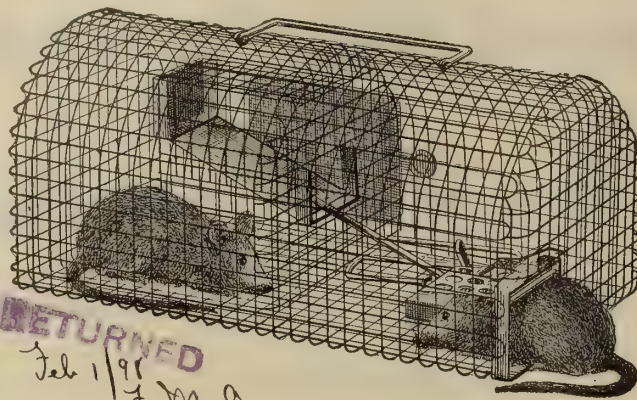
If I may be permitted to express an opinion as to the means by which this already grave and yearly increasing loss of British trade in British hardwares in the Canadian market may be arrested and ultimately recovered for the Old Country, I believe it to be imperative that English merchants should send out at once, to scour the Dominion from Halifax to Vancouver, thoroughly able and reliable men of long and successful experience as hardware travelers in England, who know their business well in all its phases—i.e., not only in the matter of the prices and values of the goods they carry, but in commercial diplomacy, tact and good manners; not men who have never been outside a merchant's office, but only those who have seen much outside service, and, if possible, who have had experience at an ironmonger's counter.

It is quite evident from the letter, from which I have not space at present to make a longer quotation, that next to following the light and artistic character of United States hardwares, English manufacturers must make up their minds to spend more money, and take more pains over the mounting of travelers' patterns in such a manner that they shall not only look more attractive at the starting of a journey than they now do, but that they shall be so

carded, boxed in, and protected as to retain their freshness for an indefinite period.—Ironmongery, London.

THE WIZARD MOUSE TRAP.

The cut shown herewith is of the Wizard mouse trap introduced into Canada by the D. Moore Co., Limited, Hamilton. To set



the trap the perforated gate is lifted until the catch holds it up. The gate, it is shown, becomes closed immediately the animal steps upon the treadle in front of the bait box, and is reopened for the next visitor when he passes over the elevated treadle on his way to the pound. For rats the company have the self-setting Yankee rat trap, advertisement for which see page 26.

SHORTAGE OF CARS.

A remarkable result of the great harvest in the Northwest is the fact that railroad companies, especially the C.P.R., cannot handle the goods which are awaiting their attention in Ontario.

The C.P.R. have had hundreds, if not thousands, of cars built to meet their traffic, and now are face to face with a shortage of engines. The salt dealers have had much difficulty in the transportation of their goods, it taking in one instance a week to ship a car of salt from Windsor to Toronto. The coal companies have also been handicapped for the last two months by reason of lack of cars, and have had to make full use of their lake carrying resources to meet their orders.

The T., H. & B. are asking the Brantford Board of Trade to indorse a petition to the Government for the bonus of \$3,000 per mile, which was once granted but not earned, because the road was not completed in specified time.

The Waterous Co., of Brantford, have given the agent of an English company a tender for a six-ton saw mill, to be sent into the Yukon. This little mill will be sent up in parts, on sleds, and when up will cut 4,000 feet a day. Little matching and planing machines will go with the plant.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

THE OAKVILLE BASKET CO.,



Manufacturers of

1, 2, 3 Bushel

Grain

AND

Root

BASKETS

THE OAKVILLE BASKET CO.

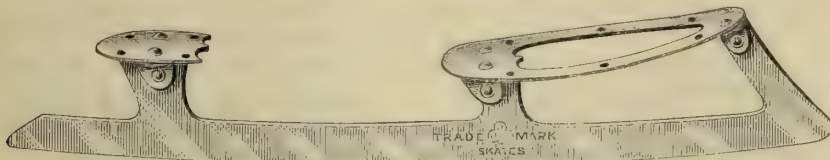
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



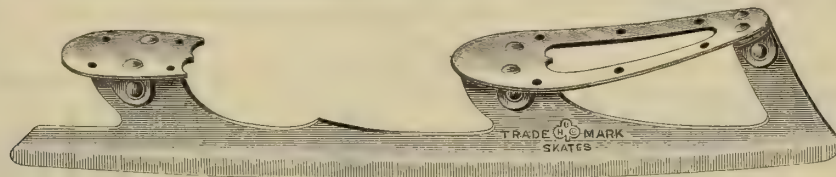
Plain Runner, Straight.



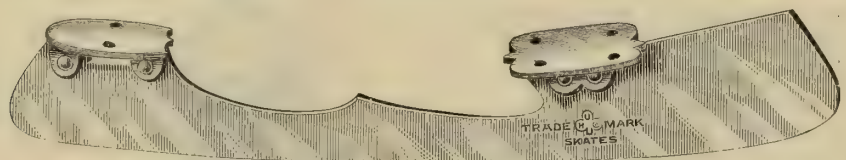
Plain Runner, Curved Blade.



Ribbed Runner.

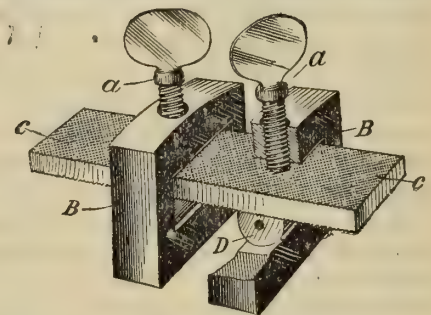


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

**THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY**

**THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.**

Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street



TORRINGTON, CONN., U.S.A.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Nov. 5, 1897.

HARDWARE.

THE fact that railway freights advance on the 15th has given business in hardware, with all other heavy material, the usual impetus, and jobbers are very busy this week pushing forward goods before the change, while new orders for prompt shipment are quite numerous. Values generally are firm, the long anticipated advance being made by makers of wire nails, and both makers and dealers report an active demand. The same condition rules in horse nails and horseshoes, bolts, draining tools, cordage, ware, cutlery and sporting goods, all of which have been quite brisk for the season.

BARBED WIRE—Demand for barb wire is quiet, but the feeling is rather firmer, and we quote the base price \$2.35 f.o.b. Montreal.

PLAIN WIRE—There is little change from a week ago, and discounts are unchanged at 30 and 10 off.

WIRE NAILS—The expected advance has materialized, and pending and since the change an active business has been transacted. jobbing lots are now held firm at \$1.90 and car lots at \$1.85 f.o.b. Montreal.

CUT NAILS—There have been a few orders for cut nails, but the aggregate volume of orders is small. Prices are steady on the base of \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Business is good and makers report that they are behind with their orders for certain brands. Discounts are 50 per cent.

HORSESHOES—There has been a good demand for horseshoes. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is a fair business doing. Discounts are as follows: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Quiet and steady at 12½ per cent.

BOLTS—A good trade is doing in bolts. Discounts are as follows: Carriage bolts, ¼ and 5-16, 70 per cent.; ¾ and up, 60

and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—There is a quiet trade doing. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—There is a good steady enquiry for all kinds of draining tools. Discounts are unchanged.

FILES—Without change. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There is a fair demand for cordage. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—Move out slowly with Royal Canadian selling at \$29.

BUILDING PAPER—There is a fair demand for building paper and prices are unchanged: Plain, 25c., tarred lining, 35c., and roofing, \$1.30 to \$1.40.

HOLLOW WARE—Good orders continue for most kinds of ware, but especially tinware and enamelled goods.

HINGES—There is a fair demand for these on country account. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—Demand for both table and pocket cutlery is well mentioned.

SPORTING GOODS—An active enquiry continues for guns, rifles and ammunition.

SHOT—Quiet and steady. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Trade continues fairly active in anticipation of the advance in freight rates. Prices are firm at \$2.10 to \$2.20 for English and \$1.85 to \$1.90 for Belgian.

FIREBRICKS—In fair demand at \$16 to \$21 per 1,000, as to brand.

METALS.

There is little change to note in the general condition of the market, trade continuing active for the season of the year. Makers report their order books well filled and enough business in sight to keep them actively employed until the end of December. Prices are firm, and neither dealers nor manufacturers feel disposed to book contracts at the present rates for delivery after the turn of the year. In fact, merchants generally express the opinion that this fall's trade has been the best they have had for many years, and the prospects for next season are bright and encouraging. The same condition of affairs is manifest in United States markets.

PIG IRON—The feeling in pig is firm. The lowest offer on American pig is \$13.50, delivered here in bond. We quote: No. 1 Hamilton, \$16 to \$16.50;



Aluminum Oil... Heater.

FOR COAL OIL.

Made entirely of bright, sheet steel and polished brass with Aluminum medallion, combining lightness and strength.

HANDSOME NICKEL PLATED TRIMMINGS.

Quick and effective heat at a small cost.
Operated same as an ordinary lamp.

Sizes Nos.	-	-	-	24	30
Height	-	-	-	30 in.	32 in.
Capacity brass oil tank	-	-	-	2 qts.	3 qts.
Circum. of brass burners	-	-	-	8¼ in.	10 in.
Weight	-	-	-	11 lbs.	15 lbs.
List Price	-	-	-	\$7.60	\$9.10

Discount %

Order a sample

THE McCLARY MFG. CO.

London, Toronto, Montreal, Winnipeg, Vancouver.

IF YOU WANT YOUR GOODS PROMPTLY,
ORDER FROM McCLARY.

Henry Wright & Co.'s ANVILS and VICES

ARE

RIGHT In quality
in pattern
in price

STOCK CARRIED IN MONTREAL.

A. C. LESLIE & CO.
Montreal

Iron, Steel and Metal Merchants.

Fire Bricks
Drain Pipes
**Contractors'
Supplies**
F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

If you want the straightest and most durable Rawhide Whips in the market, order our

Napoleon and Monarch
WHIPS

Every Whip Guaranteed.

Patented and made only by . . .

HAMILTON WHIP CO.

119, 121, 123 Mary St., HAMILTON.

Cheap Whips of Every Style.

No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—There is a good demand for bar iron, and prices are very firmly held at \$1.45 to \$1.55, with an allowance in the case of car lots.

BAND IRON—Demand has been quite brisk, and gauges from 1 to 6 inch are quoted at 30c. extra over the base price on bar iron.

HOOP IRON—There is a good enquiry for hoop iron, prices ruling firm at \$2.25 to \$2.35.

SHEET STEEL—Without change, demand being fair at \$2.35.

GALVANIZED IRON—Stocks in jobbers' hands are better assorted than they were owing to the arrival of large consignments last week, but prices are firmly held on the basis of \$4 to \$4.15.

TINNED IRON—In fair enquiry at 5½c. for 6 x 30 Bradley's Bilston No. 24; other sizes and gauges, the usual extras.

LEAD PIPE—Small enquiry at 7c. for lead and 7½c. for composition waste, subject to a discount of 27½ per cent.

PIG LEAD—Is a shade easier abroad. Stocks, however, are scarce here, and previous values are maintained at \$3.85.

INGOT TIN—There is no change in tin, prices ruling firm on the basis of 16c.

INGOT COPPER—Advices easy on this metal, but there is no change in spot quotations, which range at 12 to 12½c.

SHEET COPPER—A good demand in small lots continues. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There have been some generous consignments received this week and jobbers are in a better position to handle orders. Prices are unchanged at \$2.10 to \$2.25 as to quantity, etc.

TIN PLATES—The same remarks apply to tin plate, which rules steady as last quoted: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., \$3.80; do, I. X., \$4.80.

TERNE PLATES—There is a good enquiry for terne plate and prices are held firm on the basis of \$6.

COIL CHAIN—Quite a few lots of lumbermen's chains are moving. We quote \$2.85 for ⅝ up.

SHEET ZINC—Firm under a fair enquiry at 5 to 5¼c.

SOLDER—Steady and unchanged at 11½c.

SPELTER—A few lots keep moving and prices are steady at 4¼c.

ANTIMONY—There is no change from 9½ to 10c.

Cattle Chains

The superiority of Greening's consists in their being of uniform strength in all their parts. Simplicity of the attachments and best quality of material and workmanship.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.
FACTORIES
MONTREAL
CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.
Limited
NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron
And SIEMENS MARTIN
Open Hearth Steel
SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

IRON PIPE—In good enquiry with the advance firmly maintained. We quote: Black pipe, $\frac{1}{4}$ -inch, \$2.05; $\frac{3}{8}$ -inch, \$2.05; $\frac{1}{2}$ -inch, \$2.45; $\frac{3}{4}$ -inch, \$2.90; 1-inch, \$4.20; $1\frac{1}{4}$ -inch, \$5.35; $1\frac{1}{2}$ -inch, \$6.90; 2-inch, \$9.35; and $2\frac{1}{2}$ -inch, \$13.60. Galvanized pipe, $\frac{1}{2}$ -inch, \$4.25; $\frac{3}{4}$ -inch, \$5.25; 1-inch, \$7.25; $1\frac{1}{4}$ -inch, \$10; $1\frac{1}{2}$ -inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—There is no change in scrap, and sales of wrought iron were made at \$15.

GLASS.

The glass market has ruled quite active on account of orders for shipment previous to the 15th, when rail freights advance. We quote: First break, \$1.30 in 50 foot boxes, and \$2.55 in 100 foot boxes.

PAINTS AND OILS.

In view of the winter freight rates taking effect in ten days, there is considerable activity in the various factories to have orders shipped prior to that date. The only feature is an easier feeling in turpentine, which has been marked down 1c, and with reduced demand at producing centres, the market may come a little lower for a time. Leads, varnishes and paints maintain good sorting demand at quoted prices. Castor oil is steady at the recent decline. Seal oil is quiet, but firm, and there is a fair demand for cod oil.

WHITE LEAD—Best brands, Government standard, \$5.37 $\frac{1}{2}$; No. 1, \$5.00; No. 2, \$4.62 $\frac{1}{2}$; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, $4\frac{1}{2}$ c.; kegs, $4\frac{3}{4}$ c.; No. 1, casks, $4\frac{1}{4}$ c.; kegs, $4\frac{1}{2}$ c.

PUTTY—We quote firm with prospect of advance; bulk, \$1.50; bladder in bbls. \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Steadier; Raw, 43c. boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to $10\frac{1}{2}$ c. in cases, and $9\frac{3}{4}$ to $10\frac{1}{4}$ c. in barrels.

SEAL OIL—30c. for brown, and $37\frac{1}{2}$ c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—We quote: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, $4\frac{1}{2}$ to $5\frac{1}{2}$ c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

There is a fair demand for petroleum. We quote: Canadian, $14\frac{1}{2}$ c. in car lots and $15\frac{1}{2}$ c. in smaller quantities; American, $16\frac{1}{2}$ c. in car lots and $17\frac{1}{2}$ c. for small lots.

COAL.

There is no change in the coal market. We quote: Stove and chestnut, \$5 75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

ASHES.

There has been no important change. We quote: First pots, \$3.55 to \$3.65; seconds, \$3.25, and pearls nominal.

HIDES.

Lambskins have advanced 15 to 20c., dealers now paying 75 to 80c. each.

MONTREAL NOTES.

There has been a decline of 1c. per gallon in turpentine, in sympathy with the drop at primary points.

Makers have made the anticipated advance in wire nails and are now asking 5c. per keg more at the mills than a week ago.

Arrivals of cement during the past week comprised 2,435 casks English and 7,521 Belgian, most of the arrivals being sold forward.

There have been some large shipments of galvanized iron and Canada plate received this week, and stocks are better assorted than they were.

ONTARIO MARKETS.

TORONTO, Nov. 5, 1897.

HARDWARE.

The feature of the trade this week is the advance in the price of wire nails, which are now quoted from 5 to 10c. per keg higher. Trade generally has not materially changed since a week ago. If there is any

change in this respect it is probably toward a smaller business. At the same time, however, all the wholesale houses are still busily employed. There are still a good many wire nails going out, although the demand is not as brisk as it was before the advance. The manufacturers of brass goods are working day and night in order to keep up with the demand. The demand for leather belting is being well maintained. There is a great deal of ammunition going out, and although the demand in other lines of sporting goods is not as active as it was, yet there is still a good trade doing for this time of the year. In cutlery a nice trade is being done. Plain wire and coppered spring wire are in rather better demand than a week ago. In both horse-shoes and horse nails a decreased demand is to be noted. An active trade is being done in bolts and screws. Churns are wanted a little more than they were. Quite a noticeable increase is to be noted in the demand for the better class of spades and shovels, and building paper is in better request. Trade in granite ware and tin ware is being well maintained. Skates and snow shovels are being shipped rather freely, but sleigh bells are not yet receiving much attention. Orders are being booked for spring hinges, but prices are much higher than last year.

BARB WIRE, ETC.—Dull. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE—Orders have not been as brisk this week as last, but prices are steady. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—Plain wire has been going out more freely this week, and an increased demand has also been experienced for coppered spring wire. Discount, 30 to 35 per cent., according to quantity.

WIRE NAILS—Prices have been ad-

HORSE NAILS, "M" BRAND, 1897

WE MAKE



All packages bear our

Oval Head in Nos. 4 to 12
"New Countersunk" Head in Nos. 5 to 12
New City Head in Nos. 2 to 8

MADE SOLELY
BY US.

Trade

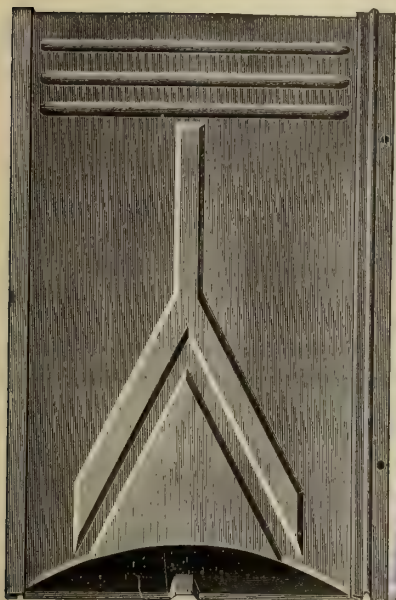


Mark

We guarantee our Nails to be standard, hot forged and cold finished. If found defective we will replace them free of charge, and pay freight both ways.

MONTREAL ROLLING MILLS CO. - MONTREAL

The "Empire" Patent Galvanized Tinned Steel Shingles



These Shingles are made from Charcoal Tin Plates formed into shape **first** and galvanized **afterwards**.

Beware of imitations that are cut out of large sheets of galvanized iron **and then stamped**. Such goods will not make a durable roof, as the coating cracks, and peels off at the locks; and, besides, the cut edges are not coated.

The "Empire" Patent Shingles are made only by us, and are coated all over—not in spots only. They are positively the only shingles that are properly made and thoroughly galvanized.

Of course, they cost a little more than the imitation. But—

METALLIC ROOFING CO. Limited

TORONTO

THE PIONEERS IN THE METALLIC ROOFING, SIDING, CEILING AND LATHING INDUSTRY.

vanced 5c. per keg on ordinary quantities and 10c. per keg on carload lots. The demand is brisk although not, perhaps, as much so as it was last week. Base price is now \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points other than those named the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—The demand has been a little better, but is by no means brisk. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—Trade has been hardly as good as it was last week, although a fair amount of business is being done. Discount 50 per cent.

HORSESHOES—There has been a perceptible falling off in the quantities wanted, but prices remain as before. We quote: \$3.25 f.o.b., Montreal.

SCREWS—The demand is active at unchanged prices. Discounts are: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS—Trade is good, especially in carriage and tire bolts. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—Are still moving steadily. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Rope has been on the quiet side. Plough line rope is about the only kind that is moving to any extent. We quote as follows: Sisal, 7-16 in. and larger, 6¾c.; ¾ in., 6¾c.; ¼ and 5-16 in.,

7¼c.; 3-16 in., 7¼c. Manilla, 7-16 in. and larger, 7¼c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—The slight improvement in the demand noted last week has been maintained. Discounts, 60, 10 and 10, from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Are quiet. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS, ETC.—The demand has noticeably increased, quite a number of the higher grades having been called for during the week. Discount, 45 and 2½ per cent.

AGRICULTURAL TOOLS—The chief articles wanted are manure forks and hay knives.

BUILDING PAPER—Quite a number of orders were received this week, principally for plain building and tarred lining. We quote as follows: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs. "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Trade continues brisk. We quote: Standard, 45, 10, 10 and

10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—Trade is keeping up exceedingly well, both in granite ware and tinware. Some large shipments have been made to the Coast.

CUTLERY—Trade is good, particularly in carvers, case carvers, and table cutlery.

SPORTING GOODS—Trade is keeping up fairly well. A great deal of ammunition is going out.

HINGES—A good many orders are being booked for screen door hinges at \$10.50 per gross pair. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.

CEMENT—Calcined plaster has been moving freely this week at lower prices. Dealers were short of English and Belgian cement, but shipments are expected this week. Belgian has advanced 5c. per bbl. We quote: in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.40; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

The metal trade continues fair, but no special features have developed during the week.

PIG IRON—Trade is quiet with prices steady. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Orders have not been quite as good during the week, although a fair quantity is still moving. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

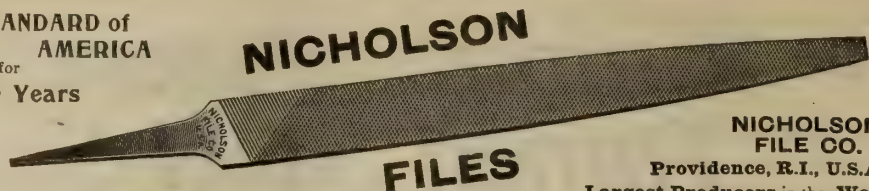
HOOP AND BAND IRON—Trade is much better, some good shipments having been made, mostly at prices quoted. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—A nice business has been done during the past week. Stocks of the lighter gauges in the better quality are low. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Certain sizes in the standard gauges are exhausted, the demand during the past month having been exceedingly strong. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Stocks are in better shape, and dealers have not now the same

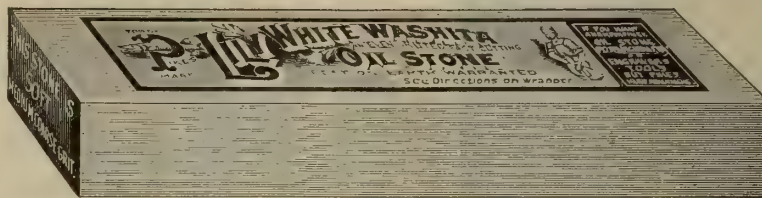
STANDARD of
AMERICA
for
30 Years



NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guaranteed
to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the .38-40 and 44-40 cartridges, but also the 25-20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

difficulty in supplying the demand, although eight-foot sheets of American are hard to get. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{3}{4}$ c.; 18 to 24, \$3.87 $\frac{1}{2}$ c.; 26, $4\frac{1}{4}$ c.; W. G. 28 gauge, \$4.37 $\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Business is much as before. We quote: $3\frac{3}{8}$ and larger, \$1.75 per 100 lbs.

TINNED IRON—Trade is still quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{3}{8}$ to $7\frac{3}{8}$ c. per lb.

LEAD PIPE AND TRAPS—The movement is a little more active, especially in traps. We quote as follows: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, $27\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Some large sales have been made, and in general trade has been fairly satisfactory. Prices are firm. We

quote pig lead at 4 to $4\frac{1}{8}$ c., and bar, at $4\frac{1}{2}$ c.

SHOT—Trade is fair. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, $12\frac{1}{2}$ per cent.

INGOT TIN—The demand for "Lamb & Flag" is good, although it is principally for small quantities. In Straits quite a number of orders for round lots have gone forward. We quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb.

INGOT COPPER—A slight improvement in the demand is to be noted. We quote 12 to $12\frac{1}{2}$ per lb.

SHEATHING COPPER, ETC.—The demand has improved for ordinary sheathing as well as braziers' and roofing. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Orders have been larger this week than for some time past, and stocks are in pretty good shape. We quote: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$1.87; $\frac{1}{2}$ inch, \$2.35; $\frac{3}{4}$ inch, \$2.87; 1 inch, \$3.87, $1\frac{1}{4}$ inch, \$5.10; $1\frac{1}{2}$ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, $\frac{1}{2}$ inch, \$4 to \$4.25; $\frac{3}{4}$ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; $1\frac{1}{4}$ inch, \$9.25 to \$9.62 $\frac{1}{2}$; $1\frac{1}{2}$ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—A number of orders have

HOUSEHOLD CANS

ESTABLISHED
1860INCORPORATED
1895

Every well-regulated house requires one of these sets. Send for sample, and you will not be long in sending for more. . . .



IN SETS OF FIVE

Lithographed
in
Fancy Colors.



Very Pretty
Designs.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

been received during the week, but quantities wanted are small. Discount, 60 and 10 per cent.

RANGE BOILERS—Business continues fair. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Trade has been exceptionally good. Owing to some delay in shipments, stocks of bright are again exhausted. We quote: Half-polished, 52-sheet boxes, \$2.25 to \$2.30; ditto, 60-sheet boxes, \$2.35; ditto, 75-sheet boxes, \$2.45; all-bright, \$2.90 per box.

TIN PLATES—Some large sales are reported, both in the way of booking orders and orders for immediate delivery. Business from stock is principally for charcoal plates. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade is quiet. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SHEET LEAD—Trade is fair. We quote: 5½c. per lb.

COIL CHAIN—Business continues fair. We quote: ¼ in., 4½c.; ⅜ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Is still in strong demand, with prices firm. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Trade is being maintained. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Has been moving more freely this week, although quantities are not very large. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

The trade at present is in as good condition, if not better, than ever before. While the fall is always a good season for glass the present briskness was unexpected, as the spring trade was large. Prices have been maintained, and owing to the scarcity of stocks, there is every prospect of higher prices ruling. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

It is gratifying to report that the fall trade is in full swing, and "fairly, busy" is the general report of the manufacturers and dealers in paints, oils and varnishes. The increased rates of freight will be in force very shortly, and the country trade have

been free buyers in anticipation of the winter tariff now in sight. Happily, there has been a good supply of lead and staples, and there are few complaints of delay in shipments. Stocks of crude material, however, are limited, and while there is no special change in quotations, values may be said to be strong and firm. A steady but moderate demand has been maintained for varnish gums, asphaltum and rosin. The October trade wound up with a flourish, the last few days being as busy as any time this summer. The totals for the month also show a very gratifying increase over the corresponding month last year. November has opened auspiciously, and the prospects are that if the open weather continues the volume of trade done will be very large. While the general trade is good, that for staples is particularly so. The prepared paint business keeps well up, owing in a large measure to the extra demand caused by the high price of white lead. Stocks in castor oil are still scarce, and prices are high. French, of poor quality, is offered at 10c., and even less, but the better grade brings 11c. per lb. In linseed oil the prices are firm. Turpentine is showing some weakness in the Southern States, but this feeling is considered merely temporary. Seal oil, tanners' oil and lard oil have been receiving some attention lately. In glues

THE KNAPP & COWLES MFG. CO. BRIDGEPORT, CONN., U.S.A.

No. 3 LENGTHENER.



BOSS SHOE STRETCHER

This Shoe Stretcher is made of the best Malleable Iron and Steel, and will stretch from infants' No. 4 to men's size No. 13; will stretch shoes at any point desired, and also lengthen the shoe. : : : :

Prices quoted upon application

there is little doing. Oxides and venetian reds are moving freely. For japan colors and carriage painters' supplies there is a fairly moderate demand. The continued orders for fine bicycle varnishes and enamels indicate that the bicycle business is quite alive yet.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 26c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, 3c. in barrels and 5c. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

The market is in but a fair condition. Cast iron is still scarce, and other lines are moving but moderately. Prices are unchanged. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2¼ to 2½c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.;

good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

HIDES, SKINS AND WOOL.

HIDES—Market unchanged, the demand continuing steady. We quote: Cowhides—Dealers pay 8½c. for No. 1, 7½c. for No. 2, and 6½c. for No. 3. Steerhides—60 lbs. and up, 9c. for No. 1, 8c. for No. 2 and 7c. for No. 3.

CALFSKINS—Stocks well cleared up. We quote as follows: No. 1 veal, 8 lbs. and up, 10c. lb.; No. 2, 8c.; Dekins, from 30 to 35c.; culls, 15 to 20c. each.

SHEEPSKINS—We quote: Lambskins and pelts, 75 to 90c.

WOOL—Fleece wool is quiet, there being none in the market. Pulled wools are fairly active. We quote super pulled wools at 21 to 22c.; extra at 22 to 23c.

SEEDS.

The trade for some time yet will be governed by values for export in competition with other markets. Red clover of ordinary average quality is moving just now at \$3 to \$3.20 per bushel at outside points, while for rich, bold seed a somewhat better figure would be paid. Alsike covers a wide range in qualities this season, prices varying from \$3 to \$4.50 per bushel. Timothy, in sympathy with American markets, runs from \$1 to \$1.25 per bushel.

PETROLEUM, ETC.

Business is fairly good this week. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

The market is in much the same condition as last week: good demand, and a lack of cars. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46, net tons.

MARKET NOTES.

Wire nails are 10c. per keg dearer in carload lots, and 5c. per keg in less quantities.

Screen door hinges are being sold for next season's delivery at \$10.50 per gross pair.

Belgian cement and calcined plaster have advanced in price 5 to 10c. per barrel respectively.

PERSONAL MENTION.

Mr. A. Douglass MacArthur, of Craig, MacArthur & Co., wholesale plumbers' supplies, Toronto, has returned from a month's hunting and fishing in Muskoka.

Mr. Thomas B. Williamson, manager of the bicycle department of M. & L. Samuel, Benjamin & Co., has left the employ of that firm.

MANITOBA MARKETS.

WINNIPEG, Nov. 2, 1897.

YOUR correspondent took a run up to Brandon last week, over the Northern Pacific, Morris and Brandon branch and noticed many important changes along that line of rail in the way of substantial buildings. The towns have grown very rapidly in the past year, particularly Miami, Baldur and Wawanesa. The effect of all this building is very apparent in the hardware trade in Brandon. In fact, Johnson & Co. told your correspondent that they had done a larger business in builders' supplies during the past year than they had done in the three previous years put together. The trade in threshers' supplies had not been as large as usual, but in all other lines trade had been exceptionally good, and payments were very fair indeed. And these remarks were very cordially endorsed by Murdoch & Co. and other hardware men.

In Winnipeg the situation has not changed materially, though there is a feeling that prices will advance in sympathy with the United States. The most noticeable advance is in lead and cordage, due, no doubt, to a shortage in the present visible supply. In all kinds of iron goods the market is remarkably firm, and if the demand continues the prices will inevitably go up.

The prices for the week are about as follows:

WINNIPEG PRICES CURRENT.

Barb wire, 100 lbs.	\$2 60
Plain twist wire and staples.	2 75
Oiled annealed wire.	2 80
"	11 2 90
"	12 3 00
"	13 3 15
"	14 3 30
"	15 3 65
Wire nails, 30 to 60 dy, keg.	2 65
" 16 and 20	2 70
" 10	2 75
" 8	2 80
" 6	2 95
" 4	3 05
" 3	3 30
Cut nails, 50 and 60 dy	2 50
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

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Telephone 689.
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IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

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ADVERTISING DEPARTMENT

MONTREAL - - - TORONTO

Horse shoes, iron, light, medium and heavy, keg.....	\$4 00
Snow shoes.....	4 25
Steel, light.....	4 25
"extra light.....	5 75
Bar and band iron, \$2.10 basis.....	
Swedish iron, \$5 basis.....	
Tool steel, Black Diamond, 100 lbs.....	8 00
Jessop.....	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs..	3 50
26 gauge.....	3 75
28 gauge.....	4 00
Galvanized American, 16 to 24 gauge.....	4 00
26 gauge.....	4 25
28 gauge.....	4 50
Genuine Russian, lb.....	12
Imitation "IX.....	8
Tinned, 24 gauge, 100 lbs.....	7 25
26 gauge.....	7 50
28 gauge.....	8 00
Tin plate, IC charcoal, 20 x 28, box.....	9 00
"IX.....	11 00
"XXX.....	13 00
Canada plate, 18 x 21 and 18 x 24.....	3 25
Sheet zinc, cask lots, 100 lbs.....	6 00
Broken lots.....	6 50
Pig lead, 100 lbs.....	4 25
Wrought pipe, black, 1/4 inch.....	2 50
"3/8 inch.....	2 75
"1/2 inch.....	3 00
"3/4 inch.....	4 00
"1 inch.....	5 00
"1 1/4 inch.....	7 00
"1 1/2 inch.....	8 50
"2 inch.....	11 50
Over 2 inch.....	65 p.c.
Rope, sisal, 7-16 and larger.....	6 75
"3/8.....	7 25
"1/2 and 5-16.....	7 75
Manilla, 7-16 and larger.....	8 25
"3/8.....	8 75
"1/2 and 5-16.....	9 25
Cotton, all sizes, lb.....	15
Axes, per box.....\$5.50	to 8 00
Screws, flat head, iron.....	85 p.c.
Round ".....	77 1/2 p.c.
Flat "brass.....	80 p.c.
Round ".....	72 1/2 p.c.
Bolts, carriage.....	60 p.c.
Machine.....	60 p.c.
Tire.....	55 p.c.
Sleigh shoe.....	65 p.c.
Rivets, iron.....	50 p.c.
Copper, No. 8, lb.....	25c.
Spades and shovels.....	40 p.c.
Harvest tools.....60 to 60-	10 p.c.
Axe handles, turned, second growth, hickory, doz.....	2 50
No. 1.....	1 50
No. 2.....	1 25
Octagon extra.....	1 65
No. 1.....	1 25
Ammunition, cartridges, Dominion R.F.....	50 p.c.
Dominion, C.F., pistol.....	25 p.c.
"military.....	15 p.c.
American R.F.....	35 p.c.
C.F. pistol.....	5 p.c.
C.F. military.....	Net.
Loaded shells, Eley's 12 gauge, M.....	16 00
American, M.....	16 20
Robin Hood, M.....	18 00
Shot, ordinary, per 100 lbs.....	6 00
Chilled.....	6 50
Powder, F.F., keg.....	4 75
F.F.G.....	5 00
Robin Hood.....	10 00
Tinware, pressed.....70 and 30	p.c.
Granite ware, according to quality.50 and 10	p.c.

PLOUGH WORKS DESTROYED.

Last week the Verity Plough Company's works, Brantford, were burned out, causing about \$60,000 loss. The insurance paid is \$40,000. The fire has thrown about three hundred men out of work, as there were both day and night staffs at work previous to it. No final arrangements have been made as to the location of the works which are to be rebuilt. About \$5,000 of new machinery has been ordered for temporary use.

Operations are again to begin at the Port Perry foundry.

GUNNING FOR GEESSE IN MANITOBA.

"ARE there any geese?" repeated mine host Williams of the Revere Hotel, Deloraine, Man. "Millions of them. Come here and I will introduce you to the Reeve of Winchester and the most successful hunter in the municipality."

The introduction was given, and resulted in HARDWARE AND METAL and a fellow-traveler receiving an invitation to drive out, spend the night with and occupy Mr. Ed. Carr's goose pits on the following morning.

On arriving at Mr. Carr's home we found that there were already three other hunters domiciled there. After a bountiful supper and a few hunting stories, we retired to rest with the understanding that day-dawn should see us installed in pits with decoys set out.

At 5.30 we sallied forth, each armed with gun and abundance of Nos. 2, 3 and 5 shot cartridges.

Soon a commotion is heard at the lake a couple of miles away; the geese are telephoning to each other, the noise resembling the barking of hundreds of small dogs. It grows more distinct until the well remembered "honk, honk" greets our ears, as the first flock, high up in the air, sails V shaped over our heads. Too high, no use firing. Now a small flock of five comes a little to the left, but lower than the first; will they notice the decoys? No, they head past, but when almost overhead swing around to the tin geese and flags. Deceived, they give a scream of disgust and prepare to resume their flight, but they are only thirty yards away. Bang! bang. First one barrel and then the other, and one slowly separates from the flock, flies a few yards and drops with a heavy thud in the stubble; bounces up a foot, falls back and with bill buried in the soil gives up the ghost.

The sport has begun and they come fast, flock after flock; first, a thin black streak appears on the horizon, which increases in size until each individual bird is seen. They are coming out against the wind, and many a shot is fired which apparently does no damage, the lead rattling against the breasts of the geese and dropping in the stubble like hail. Some thirty rounds were fired, which resulted in a bag of six. Others were seen to drop in the distance, some at least a mile away, and were probably secured by some other hunter.

When the morning flight was about over HARDWARE AND METAL, standing up to survey the carnage, was startled by a "honk! honk!" close to his head, and a fat brant was alighting amongst the decoys. Now is the time! Give it to her before she gets away!

With a flutter and flap she is off; but too late. At 30 feet she receives a full charge of No. 3 chilled shot and another of No. 1 hard, and she has passed in her checks.

No use waiting, the flight is over until 9 o'clock, when they will return to the lake. Ah! but here comes a small belated flock. Only three. They are pretty sure to decoy. Small flocks decoy best. Yes, they are coming our way. Let them have it. Four ounces of shot from two guns greet the wily truants, only one drops, and in a second or so raises its head, gets on its legs, and starts over a ploughed field; now running, now flying, one wing broken, yet the gait is by no means slow. "This won't do, we can't afford to lose this one." So, "Traveler," with two overcoats on, pockets loaded with cartridges, gun in hand, climbs out of the pit and "hoofs" it after the gray goose. After a run of a quarter of a mile he gets within range and over goes the last victim. The hunter sits down in the rich black loam and puffs and puffs, yet never taking his eye off the goose, thinks of the quantity of goods that the same energy might have sold. Getting his wind, he picks up the dearly bought bird and returns plodding slowly through furrows wondering under what item of expense he will figure in the cost of ammunition when he sends in his monthly report.

We wait for the flight back to the lake, but the wind has fallen and the birds are up in the clouds, with the exception of a few flocks that have been feeding near at hand. We succeed in knocking down two more, and, as the hired man is to drive us back to town, we gaze fondly on our game, and vow that goose shooting overtops any kind of sport known.

Windy, stormy days are the best, as the flight is near to the ground. The beauty of the sport is that you have so much shooting with so little hard work. The geese go out from the lake at daybreak to the feeding grounds on the stubble, and return at 9 in the morning. The second flight leaves the lake about 3 in the afternoon, and returns just before dark, so that if you are installed in the line of flight thousands of geese will pass over your head four times during the day.

Whitewater Lake is situated on the Deloraine branch of the C.P.R., between Bois-sevain station and Deloraine, and is one of the best spots in America for goose shooting. The geese remain from about Sept. 1 to Nov. 1. Thousands are shot every year, and should any of our eastern readers take a trip to Manitoba in the fall they can be sure of excellent sport at Whitewater Lake.

The farmers are always glad to see the hunters, and the best of accommodation and a hearty welcome is accorded visitors.

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

MUNRO & KILTY, general merchants, New Dundee, Ont., have assigned to T. A. Kilgour, Hamilton. A meeting of their creditors will be held in Hamilton on the 9th inst.

P. Gagnon, general merchant, Grand Baie, Que., has assigned.

Ed. Roy, general merchant, L'Anse St. Jean, Que., has suspended.

Rene Gagnon, general merchant, L'Anse St. Jean, Que., has assigned.

Andrew Jamieson, lumber dealer, Canterbury Station, N.B., has assigned.

W. A. Currie & Co., painters, Ottawa, Ont., have assigned to W. A. Cole.

Francis Savage, general merchant, Cape Cove, Que., is offering 25c. on the dollar.

J. A. Blondon, general merchant, St. Maurice, Que., is offering 70c. on the dollar.

J. L. Kennedy, lumberman, Burk's Falls, Ont., has assigned to James Sharpe, Burk's Falls.

The saw mill of J. C. Briggs, Ducks Square, B.C., has been sold out by the sheriff.

A. McDonald & Son, harness makers, North Sydney, N. S., are offering 60c. on the dollar.

Beauchamp & Deslauriers, sash and door manufacturers, St. Henri de Montreal, Que., have assigned.

R. A. Elliott, general merchant, Roseneath, Ont., is offering to compromise at 75c. on the dollar.

Lamarche & Benoit have been appointed curators of the business of Bel-Air Arstide, contractor, Maissonneuve, Que.

The Edwards Trading Company, doing business in Maxville and South Indian in Ontario, and Thurso and Buckingham, Quebec, are offering to compromise at 50c. on the dollar. The liabilities amount to about \$63,000.

The creditors of John Black, general merchant, Springfield, Ont., have been offered 30c. on the dollar by Ansley & Co., of Port Dover, Ont., who hold a chattel mortgage on the stock. The creditors are endeavoring to set aside the mortgage and have not accepted the offer.

The statement of the affairs of George Giller, general merchant, of Berlin, Ont., makes a good showing. The assets, exclusive of real estate, amount to \$7,525.62, consisting of stock, book accounts and promissory notes. The total liabilities are only \$3,456.47, leaving a surplus of \$4,069.15.

PARTNERSHIPS FORMED AND DISSOLVED.

Pinon & Peron, general merchants, St. Flore, Que., have dissolved partnership.

McGowan & McMurtry, general mer-

chants, New Dundee, Ont., have dissolved partnership; B. McMurtry to continue.

Micks & Cox, hardware merchants, Peterboro, Ont., are about to dissolve.

Lyman E. Farmer and Fred W. Tibbits have registered as proprietors of the firm, Farmer & Tibbits, lumber dealers, Brome Township, Que.

The Stacey Hardware and Manufacturing Co., St. Thomas, Ont., are about admitting Francis T. and Geo. Stacey, the style to remain unchanged.

W. M. Knowles & Co., coal dealers, etc., Montreal, have dissolved. A new firm has been formed under the old style by Wm. H. Kidston and Wm. M. Knowles.

A co-partnership has been registered between Breton M. Harlow and Randolph L. Harlow to run a general store in Caledonia, N.S., under the style Harlow Bros.

SALES MADE AND PENDING.

N. S. Clark, blacksmith, Ashcroft, B.C., is offering to sell out.

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The assets of C. W. Henderson, electrical supplies, Montreal, have been sold.

A. J. Allaire, general merchant, St. Guillaume D'Upton, Que., has sold his stock.

Eliza Anderson, general merchant, Riverstown, Ont., has sold out to John McGuire.

The stock of G. Bernier, general merchant, Beauport, Que., has been sold at 59c. on the dollar.

Jacob C. Fader, harness and boot and shoe dealer, Brooklyn, Hants Co., N.S., has sold his boot and shoe stock.

Morton & Co. general merchants, Fort William, Ont., have sold out their hardware business to T. Kenrick & Co.

CHANGES.

Wm. Hines has opened up a harness business in Lauder, Man.

A. McGuaig has opened up a harness business in Melgund, Man.

John Nixon has opened up a harness business in Qu'Appelle, N.W.T.

L. McCay & Co. have opened out as hardware merchants in Oxbow, N.W.T.

W. H. Young has commenced business as a general merchant in Wellwood, Man.

The Perrin Plough Co. of Smith's Falls, Limited, Smith's Falls, Ont., have obtained charter.

Richard Lockhart, saw mill owner, Riversdale, Ont., has been succeeded by Elliott Fulton.

Cochrane Bros., makers of hay forks, etc., St. Thomas, Ont., are about closing up business.

Wm. Milne & Co., waggon makers, Chatham, Ont., have been dissolved. Their manufacturing business will be continued

by the Milne-Walker Waggon Works Co., of Walkerville, Ont., who will use Wm. Milne & Co.'s factory at Chatham as a warehouse.

P. Plisson is removing his general merchandise business from Lebrét to Indian Head, N.W.T.

The Shallow Lake Woodwork Manufacturing Co., Limited, of Shallow Lake, Ont., have obtained charter.

Philip Neil Esnouf and Ernest Davis have registered as proprietors of the firm P. N. Esnouf & Co., general merchants, Smith's Mills, Que.

Alphonsine Poisson, wife of Joseph Bourgeois, has registered as proprietress of the firm, Joseph Bourgeois & Cie., general merchants, Ste. Angele de Laval, Que.

DEATHS.

J. M. Donaldson, contractor, Quebec, is dead.

F. X. Pronoveau, sr., contractor, Montreal, is dead.

John McIntosh, contractor, Stellarton, N.S., is dead.

John Densmore, of Densmore & Fleury, harness makers, Indian Head, N.W.T., is dead.

Benjamin Hines, general merchant, Argyll, N.S., is dead.

David Tessier, of Tessier & Petit, general merchants, Chicoutimi, Que., is dead.

DEATH OF G. I. WALKER.

George I. Walker, ex-Customs collector of Aylmer, died in that town a few days ago. Some years ago deceased had a paralytic stroke in Chicago, from which he never recovered. He leaves a widow and one son.

The Aylmer correspondent of The St. Thomas Journal, referring to the death of Mr. Walker, says: "He was an energetic business man, and had a wide reputation as a pork buyer and commission merchant. When Aylmer was in her infancy he bought the Van Patter farm, had it surveyed and laid out in town lots, which is now Ward No. 3, and familiarly known as Walkertown. In conjunction with his brother, Edward, he carried on an extensive cabinet and hardware business. Deceased was a Conservative in politics, a scholarly and fluent speaker and took a prominent part in the many electoral battles fought in East Elgin. His greatest delight, perhaps, was in the study of poetry, of which he was particularly fond. He was born in Monahan, Ireland, his parents coming to Canada when he was a mere lad. He was in the 55th year of his age. Besides his widow and son, Percy, his brothers, Edward, William and John, and sisters, Mrs. Alex. Love and Charlotte, survive him. Deceased carried life insurance to the amount of \$3,500.

THE CYCLE INDUSTRY.

There appear to be evil days ahead for the cycle industry. A recent report declares that in this country, between 1886 and 1897, the number of cycle factories in England has increased from less than 70 to 680; that in the United States the number has increased from 70 in 1890 to 830 at the present time; and that in Germany the cycle factories employ to-day about 25,000 hands. It is added that "a syndicate or trust to control the manufacture of piping for bicycle frames is constituted. It is composed of English and American capitalists. It has bought the Ellwood and Greenville works for \$3,000,000. There are said to be only three frame pipe factories in the United States—those at Shelbyville, Toledo and Brooklyn. Besides this, a rubber ring will be organized. The enormous consumption of rubber is sure to awaken the ambition of speculators to make such a combine. Against all this it is time to take precautionary measures. We must make our people understand, also, that German wheels are just as good as those they get from England and the United States." The correspondent of the "Industrial Union" urges that, in his opinion, "no trade treaty would be broken were Germany to tax bicycles under the title of Fahrzeug, which pay now from 6 to 10 per cent. ad valorem, and may be taxed much higher. Inasmuch as bicycles are not specifically mentioned in any trade treaties, and are not specified in German tariff lists, they can easily be brought under this class of articles." The best thing for manufacturers to do now, according to an American consul in Germany, is to send over enormous quantities of parts before such action is taken. There is a big market all over Europe for many years for good wheels at fair prices. "It will," he adds, "be a mistake if German tariff legislation is not anticipated (as American legislation has been by the Germans) by big shipments of goods against which the new laws are aimed." Where will England come in?—Iron and Coal Trades Review.

TO PREVENT PUNCTURES.

A new tire, the improvement claimed being exceedingly simple, yet one that would seem to materially lessen the danger of puncture, has been placed upon the market. Around the shoe of the tire, directly in the centre of the tread, is a protuberance of soft rubber not more than half an inch in width and three-eighths of an inch deep. This lifts the shoe of the tire when the latter has been blown tight, perhaps a quarter of an inch from the ground, not much, but sufficient to pass over many a tack, or a bit of glass that would otherwise puncture the tire. The new device also lessens the chances for slipping.

Baylis Manufacturing Co.

16 to 30 Nazareth Street, MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

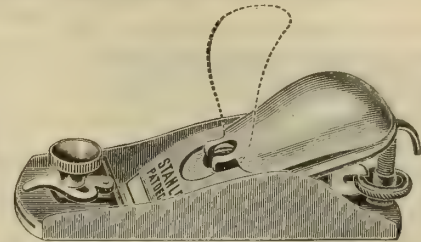
IMPROVED
Labor-Saving
**CARPENTERS'
TOOLS.**

STANLEY
RULE & LEVEL CO.
New Britain, Conn.

SOLD BY ALL
Hardware Dealers.

Stanley's Knuckle-Joint Block Plane.

WITH IMPROVED THROAT ADJUSTMENT.



The knuckle-joint in the cap makes it a lever too; and placing the cap in position, will also clamp the cutter securely in its seat.

No. 18. Nickel Trimmings, 6 in. Length, 1 3/4 in. Cutter.. \$1 75

"We'll just
leave
our card"

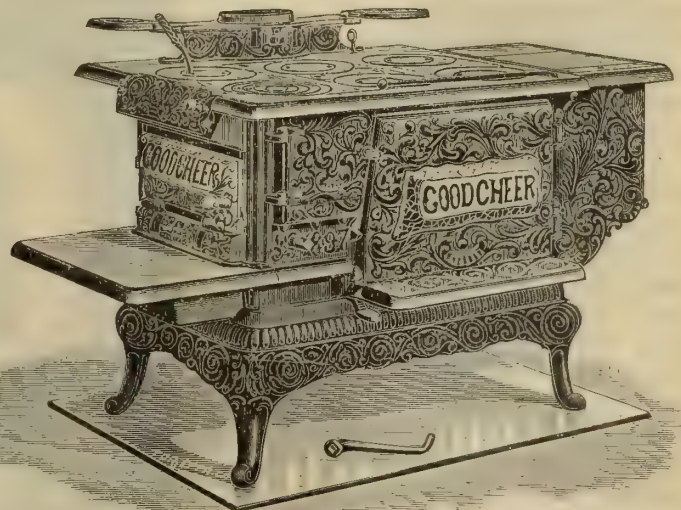
As we sell no goods at retail, we employ no peddlers. As our traveller didn't find you in when he called, we suggest that our mutual interests would gain every way if you would write us about acting as our agent for the distribution of our Brooms and Brushes direct to the consumer.

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

**Good
Cheer
Ranges**

LARGE
STEEL
OVENS

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

THE SWEDISH IRON INDUSTRY.

AXEL WAHLBERG read a paper on this subject before the International Society for Testing Materials of Construction. In it, according to an exchange, he traces the origin of the iron industry in Sweden to the "Iron Age," 500 years B.C. Wrought iron was produced directly from bog ores in conical shaft furnaces fired with wood and blown by hand power. The lumps of iron thus obtained were called "osmund," and went by that name the world over. Pig iron was produced in the middle of the 15th century. In former times phosphorus played a very small part, as it was not reduced out of the ores; with the advent of pig iron, however, the conditions were changed, and the value of the beds of pure iron ore came to be fully appreciated. Immense forests and abundant water power were advantages which no other nation possessed in equal measure, and as a consequence the middle of the 18th century found countless small iron works scattered throughout Sweden, and at that time the industry was at its zenith of expansion.

With the advent of the puddling process in 1788, which was brought out by Cort in England, things began to go down hill. The further improvement in the puddling process made by Rogers in 1824, which allowed these of pig with higher phosphorus, was a serious blow to Sweden, and cut down its output to such an extent that Swedish iron was thereafter used only for work of the highest class. In spite of these adverse conditions, improvements kept apace with the times, and in changing from the old German hearth methods of refining to the Lancashire method, a new impetus was given to Sweden's iron industry. This change came about in 1830 to 1840, and so thoroughly was the system adopted that the later open-hearth method of producing ingot steel only surpasses the production of Swedes iron in output in 1895.

The introduction of better roasting methods for ores dates from the middle of this century, Westman's ovens for this purpose being fired with the waste furnace gases. Warm blast came in about this time also. A very interesting portion of the paper is the mention made of Sweden's share of the success of the Bessemer process. Next came the Siemens-Martin process, or as it is called on the Continent—the Martin process. The Thomas Gilchrist, or basic Bessemer process, came over from England in 1879, and taking care of ores high in phosphorus, naturally was a blow to high prices obtained for the purer ores. While the iron industry of Sweden is retrograding, so far as its relative position in the world's production is concerned, yet there is a

healthy yearly increase which enables that country to look into the future with full confidence in its resources. A statistical review of the number of blast furnaces, puddling ovens, open-hearth and other furnaces, converters, etc., running in 1895 concludes the paper.

ALUMINUM OIL HEATERS.

The McClary Manufacturing Co., have the entire Canadian agency for the aluminum heaters shown in our advertising columns, which are acknowledged to be among the lightest and best working coal oil heaters made in the United States. They are made

in two sizes, and are very light, as their name implies. They are practically indestructible, being made entirely of polished steel plate together with burnished brass and adorned with aluminum plates, where the heat is so intense as to tarnish and discolor. Not one piece of casting is used in their entire construction. The upper part is hinged to allow of lighting and re-wicking. Tank can be taken out to be re-filled, so that not a particle of oil or soot need soil the finest carpets. The two sizes are Nos. 24 and 30, with brass burners of $8\frac{3}{4}$ in. and 10 in. in circumference respectively. Their entire weight is, No. 24, 11 lbs., and No. 30, 15 lbs.



RATS!



Returned
Feb 19/98
J.M.A.
 SHORT TAILED RAT: Where are you travelling to?
 LONG TAILED RAT: I am bound for the Klondike; they bought a Yankee Rat Trap down our way and I lost all my family and relations in one night.
 SHORT TAILED RAT: Did you lose your Mother-in-law?
 LONG TAILED RAT: Yes, she went in first.
 SHORT TAILED RAT: Well, I am off too; ta! ta! I will see you later.

Record of some catches made with the ...

Yankee Rat Trap

during the past few months:—

22 Rats caught in one night at Tavistock, Ont.
 26 Rats caught in one night at Hamilton, Ont.
 56 Rats caught in one week at Toronto, Ont.
 88 Rats caught in two weeks at Toronto, Ont.
 108 Rats caught in four days at Breslau, Ont.

20 Gross of Traps sold in Canada in six months.

THE D. MOORE CO., Limited, HAMILTON Sole Agents for Canada.



Christmas Silver Ware

NEW DESIGNS

AT

Popular Prices

The Toronto Silver Plate Co. Limited

Silversmiths and Manufacturers of Electro Silver Plate

Factories and Salesrooms **TORONTO, CAN.**

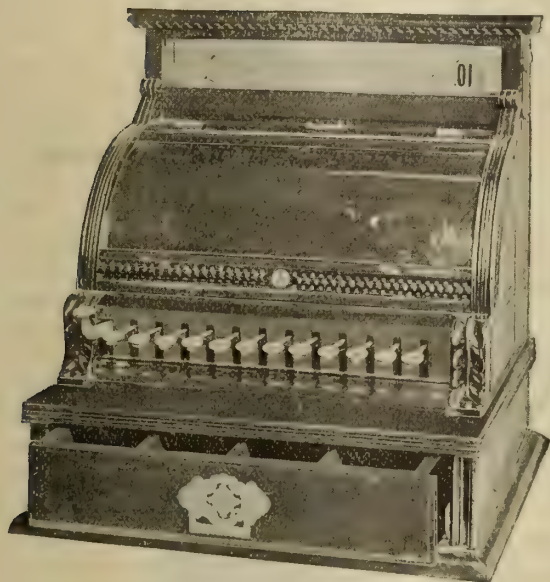
E. G. GOODERHAM,
 Manager and Sec.-Treas.

Returned
Feb 7 1898

The Counterfeit is Not so Good as the Original, and Costs More.

Buy only National Cash Registers—they are the best—and do not pay over \$70 for good detail adders. If you want the latest forms, buy a total adder, or a total-adding check and detail printer.

WHAT DO YOU THINK OF THESE PRICES?



No. 17 Detail-Printing National Cash Register.
Price \$15.



No. 18 Detail-Adding National Cash Register.
Price \$25.



No. 301 1-2 Detail-Adding National Cash Register.
Price \$50.



No. 322 Detail-Adding National Cash Register.
Price \$70.

We make ninety kinds and sizes of cash registers, ranging in price from \$15 to \$350. Samples can be seen at any of the offices of The National Cash Register Company—6 Rossin Block, West King Street, Toronto, Ont.; 1685 Notre Dame Street, Montreal, P. Q.; Winnipeg, Manitoba; and Vancouver, B. C.

AMONG THE RETAILERS.

October's Trade.

The retail hardware trade during October has been one of fine results, especially to those dealers whose trade is most directly with the farmers. The high prices realized for farm products have caused fully a revival of trade as they were expected to do. One retailer in Toronto, who does a large farmers' trade, reports that business last month has been double that of last year, and the prospects for the present month are just as promising. The hardware dealers, however, whose business is almost entirely with city people, do not find quite as great a revival as this, though they generally report an improvement over last year's trade.

Price Tags on Goods.

I wonder how it is that so few hardwaremen take the trouble to put price tags on their goods. You go into a retail grocery store and see some article you would like, and the chances are that the price is near at hand, and you can make up your mind whether you want it or not without any waiting to question or talk with the clerk. This is, too, one of the up-to-date methods of the departmental store. The hardware dealer who has the price of his goods exhibited saves the time of his customers and his clerks, both important considerations.

Dust.

Two hardware stores in Yonge street, Toronto, this week presented to my mind quite a remarkable contrast, and it was a small article that created the contrast—dust. In one store there was on nearly every article on the shelf, in the show cases, on the counter, everywhere, just enough dust to cause an appearance of dinginess, which, I think, would not have been there had the dust not been there. The other store was the reverse. It was not a better lighted store, but everything was nicely dusted and brightened up. On my speaking of the matter to the proprietor, he said: "Well, the fact of the matter is, I know from experience with women that they naturally dislike dust, and I believe thoroughly in giving them what they want and not allowing them to be prejudiced against me by having things untidy. Then I like to see things bright anyhow." All of which I considered sound sense.

Cutlery Displays.

There are in Toronto many unique methods of displaying cutlery. The most popular idea seems to be some design, such as a cross, a circle, or a triangle cut in wood and covered with red or blue flannelette, and having the cutlery attached to it one way or another. Knives are generally stuck in blade down, often in groups divided ac-

cording to price, the 25c. knives in one corner, the 50c. in another, etc. McDonald & Willson, Yonge street, have a stand shaped like a stump, and covered with flannelette, with the top of the stump slanting toward the front of the window. The knives are stuck into the top of the stump, creating an effective display.

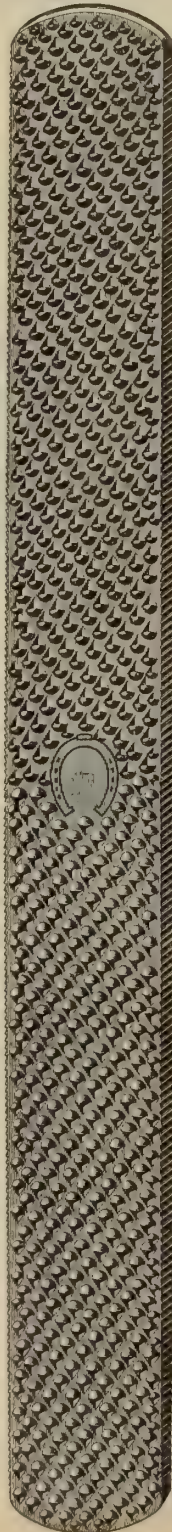
THE RAMBLER.

Fall wheat around Tilsonburg is looking well in spite of the dry fall.

STARTING A BRANCH AT GRAND VALLEY.

C. M. Irwin, who has successfully carried on a hardware business in Arthur for many years, has just secured the splendid brick store built and fitted last year for S. T. Suggitt, at Grand Valley, where he intends opening a branch with a brand new stock.

J. H. Merrill, general merchant, Smith's Mills, Que., has sold out his store to E. M. Ernouf, who has already taken possession. Mr. Merrill is moving into the house by his saw-mill.



Globe Files and.... Rasps

We manufacture a full line of these goods from high-grade Crucible Steel.

Mill Saw Files

Taper " "

Bastard " "

Warding " "

Swiss " "

Horse Rasps

Shoe " "

Cabinet " "

And warrant every File and Rasp bearing our Trade Mark.

The Globe File Mfg. Co.

PORT HOPE, ONT.

Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high
11 inches wide
17 inches deep

2 SIZES WITH OVEN**2 SIZES WITHOUT OVEN**

Manufactured by

Burrow, Stewart & Milne

HAMILTON

Agents for Manitoba and Western Territories, Merrick, Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and P. E. Island, W. L. Haldimand & Son, Montreal.

IVER JOHNSON'S NEW BUILDING.

The Iver Johnson's Arms and Cycle Works have now in process of construction in Fitchburg, Mass., their resident city, one of the most elegant and complete business blocks in Worcester County. It is a five-storey-building, of Indiana sandstone and Roman brick on iron frame, with French plate glass frontage in first and second storeys.

The first floor is devoted entirely to stores, all of which are well lighted and elegantly finished. The second floor is fitted for offices in the most approved style. The third, fourth and fifth floors are devoted to suites, with both a public and a private cafe. The finish of the building throughout is quartered oak, and the same is equipped with every modern improvement which can be had, such as mail chutes, electric call bells, messenger service, together with the most approved system of heating, electric lighting, etc. The building will be equipped with both freight and passenger elevators, run by electric motors. The heating will be furnished from two boilers of 50 h.p. each. Both the public and the private cafe will be on the upper floor, and will be conducted on the American and also on the European plan by a competent chef.

The lot upon which the block is situated is at the corner of Main and Putnam streets, in the very heart of Fitchburg, and opposite to the Y.M.C.A. building; every side of same is exposed, so that all portions are well lighted. In short, it is a building of which the city, as well as the builders, may well be proud, and proves that the Iver Johnson Co. can construct a good building as well as a good bicycle. It is expected that the whole will be ready for occupancy by March 1, 1898. The value of the land and buildings is estimated at \$400,000. The Iver Johnson Sporting Goods Co., a branch of the main firm, will occupy one of the large stores, their present quarters being inadequate for their largely increased business.

MATCH OF A MATCH MAN.

The head office of the E. B. Eddy Co., Limited, Hull, appears to be a good place for matrimonial matches, as well as parlor matches. Twice within a period of two weeks has there been a marriage among the members of the staff. The second victim of what one member of the staff termed a fatal result of courtship is Mr. Alexander Burnett, who has had charge of the advertising department of the Eddy Company for some years. The bride was Marguerite, widow of the late Willie Howe, of the Department of the Interior, Ottawa. The marriage ceremony was performed in Montreal. Mr. Burnett is well known throughout Canada, and HARDWARE joins with them in tendering congratulations.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

Razors Pen Knives

H. BOKER & CO.



For Sale by

WOOD, VALLANCE & CO.

HAMILTON.

INSURE YOUR LIFE IN THE CONFEDERATION LIFE ASSOCIATION

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only--that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE--TORONTO.

W. C. MACDONALD,

Actuary.

J. K. MACDONALD,

Managing Director.



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

SOME NOTES ON GLUE.

GLUE is an extraordinary and curious substance, almost universally regarded as possessing a sort of indefinable constitution. As well-known, it can be extracted from such different articles as horns, hoofs, tendons, and the waste clippings from the leather industry, so that in the main the commonly-adopted opinion may be accepted, says an exchange. Take twenty samples of glue and it will be found that they all present considerable divergence of composition. Nevertheless, looking at them from the point of commercial value they each possess a certain quality which is quite distinct and well defined.

DECEPTIVE GLUES.

The value of glue is a matter which chiefly affects the buyer and he will buy wisely who buys only upon the result of an analysis. Many of the glues on the market are deceptive and utterly useless for the purposes to which in the way of commerce they are applied. To large buyers respectable firms will only be too pleased to give their customers either a written guarantee of their absolute purity or a copy of analysis. Such a system of buying will soon be the only one open to the prudent dealer, because it is possible, by taking advantage of scientific facts, to adulterate beyond the risk of discovery by mere rule of thumb. In view of the difficulties met with in the direct determination of chondrin and gelatine, the non-gelatinous constituents of commercial glue are estimated. To this end 15 grammes of the glue to be tested are placed in a 250 c.c. flask, covered with 60 c.c. of water, and left for 12 hours. The flask is next heated on the water-bath till a complete solution of the glue is effected. The loss of water evaporated from the flask is made good, and the flask is filled almost to the mark with alcohol of 90 deg. It is then allowed to cool, filled full up to the mark, and well shaken, and placed aside for six hours. The liquid is next filtered, 25 to 50 c.c. of the filtrate are evaporated to dryness, and the residue is dried at 100 deg. and weighed.

Although this method yields only approximately accurate results, it is very trustworthy and useful for comparative results, and the following are some of the results to be obtained: Gelatine (five samples) contained on an average 3.39 per cent. of non-gelatinous compounds; bone-glues (from bones treated with hydrochloric acid, first extract) (four samples), 10.33 per cent.; bone-glue (obtained under pressure with the use of little or no acid) (seventeen samples), 20.66 per cent.; glue employed for clarifying wine (2 samples), 33.2 and 59.3 per cent.

MARINE GLUE.

Marine glue is probably the strongest cement known, and, when well made and properly applied, it is capable of uniting wood, metal, glass, leather, etc., with a strength and durability that are astonishing. It is really a combination of shellac and india-rubber, in proportions which vary according to the purposes for which the cement is to be used; some is very hard, some quite soft. The degree of softness is also regulated by the proportion of naphtha used for dissolving the india-rubber and shellac. It is, however, rather difficult to prepare on a small scale. For the ordinary variety the following is the formula: India-rubber (cut small) two parts, coal tar and naphtha 24; digest in a covered vessel with heat and agitation, and when solution is complete add 40 parts of powdered shellac. Continue the heat and stirring until perfect liquefaction has taken place, and pour the fused mass, while it is hot, on slabs of polished metal or very smooth stone, so as to form thin sheets. When used it must be heated to its melting-point, 248 to 250 deg. Fahr. (120 to 121 deg. C.), in an iron vessel, and applied in a liquid state with a brush. However, this is really not a cement for a novice to handle. If the solid cement be heated but a single degree above its melting-point, it becomes brittle, and crumbles, and it is, therefore, absolutely useless.

HANDLING GLUE.

For persons who have not had much experience in handling these cements, the

following method is suggested as being the best: Cut into shreds and place these between the parts to be joined together, and heat the whole until the glue can be pressed into close and regular contact with the entire surfaces. Sometimes it is convenient to use a form of the glue which is more fluid from containing more naphtha. The following media answers in aforesaid cases, but are certainly not so strong as the ordinary marine glue: Dissolve six parts of shellac and two parts of india-rubber in separate vessels, in ether free from alcohol, applying a gentle heat. Mix the two solutions together and use rectified sulphuric ether that has been washed to remove alcohol and acidity and india-rubber that has not been vulcanised. When the india-rubber has become well softened by the ether, break it into small pieces and stir well until a homogeneous mass is obtained. It will be as well to cut the rubber into small pieces before pouring the ether on, but the mass must be frequently and very well stirred. Pour the solution of shellac into that of the rubber, and incorporate them thoroughly by well stirring. This is a modification of the famous marine glue, and resists the action of water, both hot or cold, and most of the acids and alkalis. If the glue be thinned by the admixture of ether, and applied as a varnish to leather along the seams, where it is sewn together, it renders the joints or seams perfectly water tight, and is almost incapable of separation by fair use or wear. In attempting experiments with these media it is important to exercise the greatest care, for the dissolving spirits are of such a nature as to soon ignite.

CATALOGUES, BOOKLETS, ETC.

FALL AND WINTER SPORTING GOODS.

The attention of the trade is called to the winter sporting goods catalogue which has just been issued by the Wightman Sporting Goods Co., whose advertisement will be seen in another column. It is a neat and comprehensive booklet and will be appreciated by all who take any interest in outdoor sports. The catalogue will be mailed to all who ask for it.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

TRADE MATTERS IN BRANDON.

As Brandon is one of the recognized wheat centres of the province, and wheat at present such an absorbing topic, your correspondent thought a trip up here and some notes on the spot might be of interest. Coming up along the line of the Northern Pacific nearly the whole distance is through a good grain country and operations in wheat seemed to be very active. At almost every station some local man met some buyer, on the train, and the talk was all car lots, scarcity or supply of cars, rates, elevator space and the like. A very marked feature along the Northern Pacific is the amount of building done during the past season, and in fact many buildings are still in course of completion.

CHANGE IN THE BUSINESS SITUATION.

In the city of Brandon the whole business situation has changed. For a few years past this little city has been feeling the effects of a rather inflated growth, a good many houses and buildings stood empty and the general volume of business was small. Now all this is changed and one of the real estate men assured your correspondent there was not a vacant house in town and in fact many old buildings which had been discarded for years had been refitted and were now bringing good rents.

Saturday morning about 8.30 the loads of grain began to come in. By noon Rosser Avenue (the main street) was like a fair. The fact that 80c. was offering for wheat caused a rush, and a tremendous amount was bought and sold. Of course, much has been written and printed about the combine, and at no point in the province has the war waged hotter than at Brandon. One man, R.E.A. Leech, secretary of Farmers' Institute, has gone on the street as a buyer on his own account, in opposition to the combine, and on Saturday bought 45,000 bushels at 80c. on a 19c. rate of freight.

80 PER CENT. OF CROP MARKETED.

It is generally thought here that fully 80 per cent. of this year's crop has already been moved, and that there will not be more than twelve million bushels for export, and some of the large millers will find themselves left when they come to look for Manitoba wheat. The perennial question of grading and mixing is well to the front this year, owing to the particularly fine sample of wheat offering, the Manitoba farmers feeling that if their wheat could only reach the millers and the English market without interference it would greatly enhance the reputation of the province. Many remedies are suggested. Perhaps one most frequently urged is that all outward inspection from Fort William be abolished and the grade given by Government inspectors at whatever point inspected be sufficient without the grain being again graded at Fort William. Rightly or wrongly, there is a strong feeling against the way matters are managed at Fort William.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties, Cordage and Twines.

LONDON



IRON FENCING and all kinds of

Iron, Wire and Brass Work

Address—
Toronto Fence and Ornamental Iron Works
(Joseph Lea, manager)
ADELAIDE ST. WEST

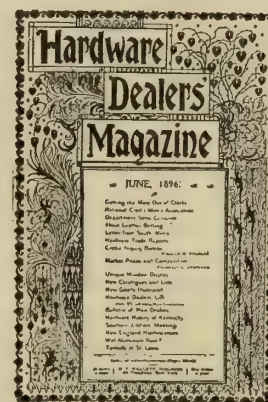
PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



ONE
DOLLAR
A
YEAR

★
Sample
Copy
Free

★
D. T. Mallett
Publisher
271 Broadway
New York



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

HEATING APPARATUS.

WITH the gradually approaching cold weather the subject of heating apparatus for the household occupies the attention of heads of families, remarks Stoves and Hardware Reporter. Beyond a doubt, the increasing prevalence in the use of furnaces has injured the sale of stoves to a marked extent; but innumerable small houses are still built with the intention of heating them with stoves and grates, so that the hardware business may still prosper and thrive. Many people prefer heating by stoves rather than furnaces, owing to the fact that furnaces may get out of order too readily, and they also see the superior advantages to be obtained in heating up the rooms more quickly and the added cheerfulness which is obtained by the glow from the fire, where an oil stove or hard coal burner is used. It is difficult to understand the workings of the minds of some architects, since one often sees rooms in houses which have no preparation made for any kind of heating apparatus, and where the house is only rented tenants do not feel called upon to go to the expense of building a new chimney. Here is where the oil stove is a god-send in every sense of the term. The improved patterns of these stoves make them very attractive and useful acquisitions to the house-furnishing hardware. With much difficulty these stoves were brought to a high degree of perfection where a great deal of heat will be thrown out and at the same time no unpleasant odors emanate from them. Early patterns were constructed on a plan which rendered them dangerous investments, owing to a tendency to become involved in accidents; little or no danger is now attached to the use of them. They combine many advantages, being portable, clean and comparatively inexpensive; they are almost as cheerful as a grate fire, the blaze sending a brilliant glow throughout the room. They are now made in the most ornamental styles imaginable; in Oriental designs, the filigree cast-iron panels, combined with the brightly-colored glass, are quite picturesque and artistic when lighted. The light is 100-candle power, central draft burner, the container holding three and one-half pints of oil, which will burn ten hours with one

filling. Many of these stoves have reached such a degree of perfection that they are used for purposes of adornment in halls, conservatories or bedrooms. No enterprising dealer should be without a full line of oil stoves in all prices, as they are used more freely in the country even than in the city.

AMERICAN CAST-IRON PIPES.

The boast of the American pipe founders that they could turn out water and gas pipes at prices very much below those of our makers has been put to the proof in at least two instances in this country within the past few weeks. At Glasgow, the American tender has been accepted for certain sizes of pipes at a price somewhat considerably below all the local offers. At Edinburgh, the American tender for 1,000 tons of cast-iron pipes was at £4 16s. per ton, whilst the lowest local offer was at £5 6s. per ton, and the American pipes were to be in 12-foot lengths, whilst the local ones were in the customary 9-foot lengths. As the Edinburgh Water Trust wants the pipes immediately, the order will not go to the United States, but the fact that our pipe founders can be, and are being, so largely underbid should cause them to look into the matter carefully and promptly. With a full knowledge of the facts, and after investigation of American practices and conditions, we warned them some time ago, and we now repeat and emphasize that warning. There is a disposition in some quarters to believe that these pipes are being offered here at "slaughter-house" prices, and that in their own market the American pipe founders secure far higher prices. We are sorry to state that such is not the case, and in support of our assertion we cite the fact that at Chicago a fortnight ago the city contracts for 34,800 tons of cast water pipe (22,572 tons being 36-inch, the other sizes being 6 to 12 and from 16 to 48-inch) were awarded at from \$16.89 to \$16.93 per ton. This works out at about £3 10s. 4d. to £3 10s. 6d. per ton, consequently there is a fair margin of profit at the prices which have been quoted for Glasgow and Edinburgh. There is very little doubt, indeed, that the American founders can produce these pipes at about \$15, or, say, £3, per ton at their works. That figure need not necessarily

alarm our founders if they set about their reforms properly and practically.—Ironmonger, London, Oct. 23.

PLUMBING NOTES.

The premises of Lessard & Harris, plumbers, Montreal, have been damaged by fire. The firm was insured.

Etienne Boucher and Joseph O. Boucher have registered as proprietors of a plumbing firm, E. Boucher & Fils, Sherbrooke, Que.

W. C. Kipp has secured a permit for the erection of three frame cottages on Thornton avenue, Sarnia, Ont., at a cost of \$700 each.

The Ontario Wind Engine and Pump Co. have taken out a permit for a \$2,000 brick factory on Liberty street, near Mercer, Toronto.

Mr. Wm. Clark has taken out a permit to erect a two-storey brick residence on York street, between Waterloo and Colborne, London, Ont., to cost \$2,000.

G. W. Beardmore, of Toronto, intends spending about \$30,000 in rebuilding and refurnishing the New Royal Hotel, Hamilton. His intention is to give Hamilton a hotel equal to anything at present in Toronto.

During October permits were issued in Toronto for the erection of buildings valued at \$143,675 compared with \$138,120 for October, 1896. For the year to date permits have been issued to the value of \$829,711 compared with \$657,168 for the whole of 1896.

Permits have been taken out by Charles Mills for alterations to a store at King and Catharine streets, Hamilton, for N. D. Galbraith, to cost \$400, and to E. B. Patterson for a brick addition to a dwelling at the corner of Wood and James streets, the same city, for Mrs. Harvey, to cost \$250.

WANTS CATALOGUE OF PLUMBING GOODS.

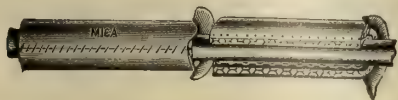
E. Jackson & Son, tinsmiths, plumbers, etc., Windsor, N.S., were burnt out in the great fire at that place, and have requested HARDWARE AND METAL to ask all manufacturers and dealers in these lines to send them their respective catalogues.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING

Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

H.O. CANFIELD - BRIDGEPORT, CT.

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

PLUMBING CONTRACTS.

Fiddes & Hogarth, Toronto, have the contract for the heating of a residence on College street for Mr. Thomas Sanderson.

A. MacKay & Co., of Montreal, have secured the contract for the plumbing, heating, ventilating and roofing two houses for Mr. Fraffer, Montreal Annex.

Garth & Co., Montreal, have been awarded the contract for heating the New Mechanical and Mining Engineering Building of the McGill University. The contract calls for 800 sq. ft. of radiators, which will be half Safford and half Gurney.

Guest & Co., Toronto, have contracts for the gas-fitting of a residence for Mr. Muirhead, Kingston road; for the plumbing for a residence for Peter McDonald, Ontario street, Toronto, and for the hot water heating of a house in Toronto Junction.

"LIMITED."

We were amused the other day by a dispute we overheard regarding the use of this word in connection with the name of a certain business firm, says American Investments. One of the speakers was quite positive that it meant the firm was restricted by some peculiar and unknown law or some special agreement between the partners of which the public and creditors know absolutely nothing; that business was limited to certain specified transactions or lines, and that when these were transgressed the firm had no legal standing. The other was equally sure that it meant the number of persons equally interested in the business was confined to those publicly known and advertised as such.

The true import of the word "limited" when used in a commercial sense should be known by every business man, and this duty is all the more imperative because the term is so frequently met with in these days. The custom of using it was brought over from England many years ago, and may be said to have been comparatively unknown a quarter of a century since.

The term applies only to the extent of the liability of the members of a partnership

or corporation. This limitation is not necessarily equally distributed among those concerned in the business, but may vary in amount as agreed upon, one being liable to one-half the capital stock and the remainder being distributed among a dozen or more of the remaining shareholders. In such cases the very law that gives authority or privilege of making these limitations also requires that the word "limited" shall always be used in connection with the firm or corporation. Wherever it is seen it stands as a post of warning to all that they must look out and satisfy themselves as to the liability of the firm members. There is nothing unfair in adopting it. On the contrary, it is eminently fair and just that outsiders should not presume that, because a man of means has become identified with a firm, his ability is equal to that of a less responsible member. One may desire to undertake a certain venture and be willing to risk his investment, but no more. His use of the word "limited" enables him to do so.

HORSESHOER'S KNIFE STONE.

The Pike Manufacturing Co., of Pike Station, N.H., have placed on the market an article which is calculated to supply a great need among blacksmiths. It is the horseshoer's knife stone, the accompanying cut being an illustration of it. It is for sharpening farriers' knives, buttresses and all edge tools. As it is fast cutting grit, it will not glaze, and is made to fit the hook of a farrier's knife. It is an article which every hardwareman should carry in stock and push.

**ENGINES FOR SHEFFIELD.**

The Robb-Armstrong engine, which is manufactured at Amherst, N.S., is making quite a name for itself in England. Three were last week ordered to go to Sheffield.

A CHEAP UNDERGROUND PIPE.

A plan for constructing an underground pipe, that is not to be subjected to a great pressure, has been employed in France with satisfactory results. A trench is dug and the bottom leveled with cement mortar; an inflated rubber tube covered with canvas is then laid in and cement is poured around and over it. The trench is then filled in and the tube deflated and withdrawn. It is said that six-inch pipes have been made of hydraulic lime and sand at a cost of twenty-two cents per yard. This style of pipe might sometimes be the thing to try for a wind pipe to a cupola.

TORONTO'S OCTOBER TRADE.

The export returns for the port of Toronto for October this year are very satisfactory, showing an increase of \$73,075, as compared with the corresponding month last year. The greatest increase is in meats of all kinds, of which \$91,656 more were exported in October this year than in October last year. The increase in the value of horses exported is over \$48,000, which is accounted for by the sale of race horses valued at \$46,350. The export of lumber has decreased over \$57,000, and no wool was exported at all, as against \$30,383 last year. The value of bicycles exported has increased nearly \$20,000, and manufac-

tured goods exported have increased \$37,861 in value. Agricultural products, eggs, etc., have decreased somewhat in value of export. The imports on free articles amounted to \$644,442, compared with \$503,896 last year.

The authorities at the local Manitoba immigration office say that 8,000 settlers have gone to the Prairie Province this year, exclusive of the 6,000 farm laborers, a large number of whom will probably locate there. This breaks the record for many years past.

Wads.—Baldwin

Best thick white felt wadding, in ½-lb bags.....	per lb	1 00
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.

Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 03½	0 10

Augers.

Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	5 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.

Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddlers, per gross.....	0 45	1 60

Awl Hafts.

Patent Peg, oss.....	7 25	8 00
" Sewing, per gross.....		

Awl and Tool Sets.

Millar's Falls, per doz.....	2 80	3 30
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AXES.

Splitting Axes.....	5 25	5 50
Chopping Axes.....		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50

Axle Grease.

Per gross.....	6 00	13 00
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Bath Tubs.

Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list.		
Steel clad, 20 per cent. discount off revised list.		

Boxing extra

Bells.

Brass, 60 per cent.....		
Nickel, 55 per cent.....		

Door.

Gon Sargent's.....	5 50	8
Peterboro', discount 50 per cent.		

Cow.

American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.

American, each.....	1 25	3 00
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House.

American, per lb.....	0 35	0 40
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Bellows.

Hand, per doz.....	3 35	4 75
Moulders, per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.

Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.

Per doz.....	5 00	6 00
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Bits.

Auger.

Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		

Car.

Gilmour's, 47½ to 50 per cent.		
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Expansive.

Clark's, per cent.....		
Excelsior, 10 per cent.....		

Gimlet.

Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.

Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 12	1 20

Blind and Bed Staples.

sizes, per lb.....	0 7½	0 12
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Bolts.

Carriage, dis., 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 per cent.		
Elevator, dis., 8 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.

Complete, with augers, each.....	5 00	7 50
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Braces.

Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Millar's Falls.....	15 50	29 00

Brackets.

Shelf.

Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20

Broilers.

Light, dis. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ per cent.		
Henis, No. 8, ".....	6 00	
Henis, No. 9, ".....	7 00	
Queen City ".....	7 50	10 00

Butchers' Cleavers.

From 8 to ch, per doz.....	4 23	
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Butts.

Brass.

Wrought Brass, dis., 17½ p.c. revised list.		
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Cast Iron.

Loose Pin, dis. 70 per cent.		
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Wrought Steel.

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65

Can Openers.

Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50

Card.

Horse, per do.....	0 60	1 00
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Carpet Stretchers.

American, per doz.....	1 00	50
Bullards, per doz.....	6 50

Carpet Sweepers.

Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star ".....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		

Cattle Leaders.

Nos. 31 and 32, per gross.....	8 50	9 50
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Cement.

Canadian, Portland.....	2 50	
English ".....	2 50	
Belgium ".....	2 35	
Canadian hydraulic.....	1 10	

Figures are for barrel lots.

Chalk.

Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18

Chisels.

Socket, Framing and Firmer.

American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00

Churns.

Daisy or Leader, dis. from stock or factory		
60, 10 and 10 per cent.		
Steel, net.....		3 00

Clamps.

Judds', dis. 20 per cent.		
steam, per doz.....	3 00	10 00

Clips.

Axle dis. 65 per cent.		
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Coffee Mills.

Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....		70

Compasses, Dividers, Etc.

American, dis. 62½ to 65 per cent		
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Cradles, Grain.

Canadian dis. 25 per cent.		
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Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.

Torrey's Rod, per doz..... (15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00

Draw Knives.

American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.

Hand and Breast.		
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Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.

Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 and 5 to 55 per cent.		

ELBOWS.

Stovepipe.

Per doz.....	75	1 70
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FAWCETS.

Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star, ".....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 50 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 to 60 per cent.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 to 60 per cent.		
Heller's Horse Rasps, 50 per cent.		
Jowitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.

Each.....	0 60	2 00
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FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		
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FREEZERS

Ice Cream.

Gem from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.

Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.

Acme, dis. 65 to 67½ per cent.		
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GAUGES.

Marking, Mortise, Etc.

Stanley's, dis. 50 to 55 per cent.		
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Wire Gauges.

Winn's, Nos. 26 to 33, each.....	1 65	2 40
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GLASS.

Window.

Box Price.

	Star.	Double Diamond.
Size United Inches.	Per 50 ft.	Per 100 ft.
Under 25.....	1 35	3 80
26 to 40.....	1 50	4 15
41 to 50.....	3 30	4 80
51 to 60.....	3 60	5 50
61 to 70.....	3 90	6 35
71 to 80.....	4 30	6 90
81 to 85.....	4 85	7 70
86 to 90.....		9 10
91 to 95.....		9 90
96 to 100.....		11 50
101 to 105.....		13 50
106 to 110.....		15 75

GLUE POTS.

Tinned, each.....	0 30	
Enamelled each.....	0 55	

GRINDSTONE FIXTURES

P. S. & W., per doz.....	3 60	4 00
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HAMMERS.

Nail

Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.	
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Tack.

Magnetic, per doz.....	1 10	1 20
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Sledge.

Canadian, per lb.....	0 07½	0 08½
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Ball Pean.

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.

Russell & Erwin, per doz. 1 75 7 50

Cabinet,

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00

Scandinavian, " 1 00 2 40

Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.

Round head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25

No Name Metal, " 18

Mystic Metal, " 08

F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50

Carpenters', hickory, per doz. 1 25 3 75

Lignum Vitae, per doz. 3 85 5 00

Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00

American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.

German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85

f.o.b., Toronto, Montreal, Hamilton.

London.

Cut Nails (Steel). Add 10c. to the prices in

list for iron nails.

Wire Nails, basis, \$2 per keg Toronto. For

places outside factory points, \$1.9 f.o.b.

Montreal. Carload lots, 5c. per keg less

than above figures.

Brads and finishing nails, special sizes, 80

p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon,

per gross 3 38 4 00

Diamond 12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½

Carbon safety " 0 18 0 00

Canada w. w. " 0 18 0 00

American w. w. " 0 00 0 21

Pratt's Astial. " 0 00 0 22

OILERS.

McClary's galvan. iron oil can,

with pump, per doz. 0 00 19 50

Zinc and tin, dis. 50, 50 and 10.

Copper, per doz. 1 25 3 50

Brass, " 1 50 3 50

Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25

Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00

Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis

Mfrs., Bridgeport, Conn.

No. 30 Hand Machine, range ¼ to

2 in. R. & L. \$ 50 00

No. 38 Hand Machine, range 1½

to 4 in. " 100 00

No. 56 Hand Machine, range 2½

to 6 in. " 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent.,

American dis. 55.

Wood, fancy Canadian or American, 37½

to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.

Miscellaneous, dis. 25 to 27½ per cent.

Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½

40 p.c.

Button's Imitation, per doz. 5 00 9 00

German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

S. R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00

Axle " 0 22 0 33

Screw " 0 27 1 00

Awning. " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.

Pitcher spout, 70 to 70 and 5 p.c.

Canadian cistern, 60 p.c.

Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85

Conductors, " 9 00 15 00

Tinners' solid, per set. 0 00 0 72

" hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½

Sliding door, " 0 03½ 0 03½

Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis

60 to 60 and 10 p.c. revised list.

Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00

Eokers, " 7 50 11 00

Wade & Butcher's, " 3 60 10 00

Arbenz's, " 9 00 18 00

Theile & Quack's " 7 00 12 00

RAZOR STROPS.

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Carriage, Section, Wagon Box Rivets, etc.,

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Carriage, Section, Wagon Box Rivets, etc.,

(Norway Iron), 60 p.c.

Black M. Rivets (Steel), up to 2½ lbs. inclu-

sive, 65 and 5 p.c.

Black M. Rivets (Steel), 3 lbs. and heavier,

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Black M. Rivets (Norway Iron) 60 p.c.

Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.

in ½-lb. boxes and

cartoons, 1c. per lb. extra, net.

Burrs, iron or steel, 55 and 5 per cent.

Terms, 4 mos. or 3 per cent. cash 30 days.

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Canadian dis. 35 to 37½ per cent.

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7-16 in. and larger, per lb. 6¼ 00 7½

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½ and 5-16 in. 7¼ 00 8½

Cotton 15 17

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" N.P., per set. 0 90

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Dome, Shepard's, per doz. 4 75 5 00

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Dominion Flint Paper, 50 per cent.

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Kempshell's, dis. 40, 62½ per cent.

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Sectional, per 100 lbs. 1 40 1 50

Solid, " 1 10

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Crosscut, McMillan & Haynes,

per dozen. 0 40 0 70

"Empire," McMillan & Haynes,

per ft. 0 00 0 70

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S. & D., 40 to 40 and 10 per cent.

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S. & D., dis. 35 p.c. on Nos. 2 and 3.

Hack, complete, each. 0 75 2 75

frame only. 0 00 0 75

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Whiting " 0 47 7 00

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B. S. & M. Scales, 50 p.c.

Champion 60 per cent

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Boot, " 0 40 3

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black. " 1 8 2 25

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Lock, Andrews' " 4 50 11 50

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Hardware and Metal, Toronto

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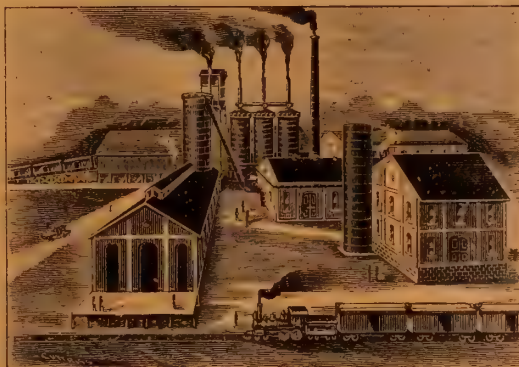
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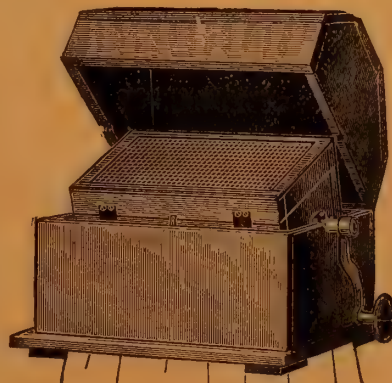


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VOL. IX

MONTREAL AND TORONTO, NOVEMBER 13, 1897

No. 46



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Best Anti-Friction Metal for all Machinery Bearings

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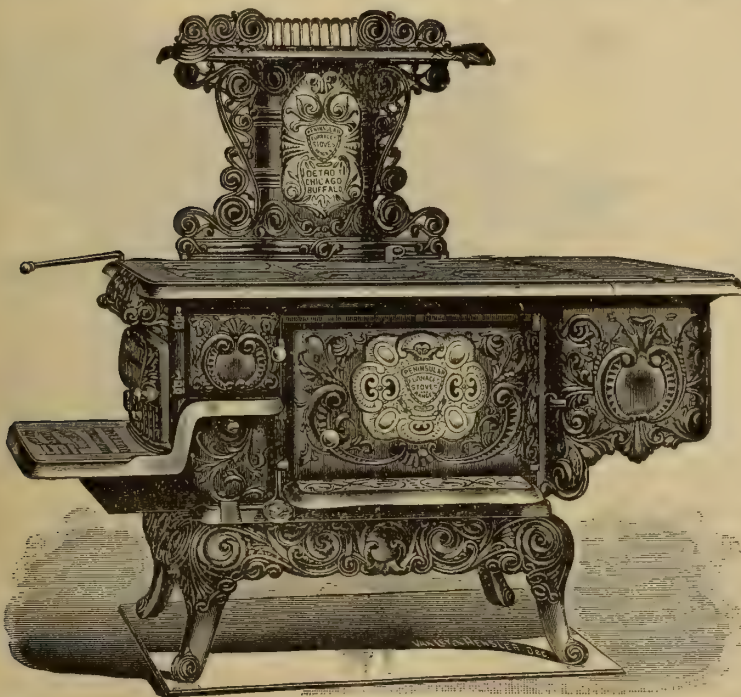
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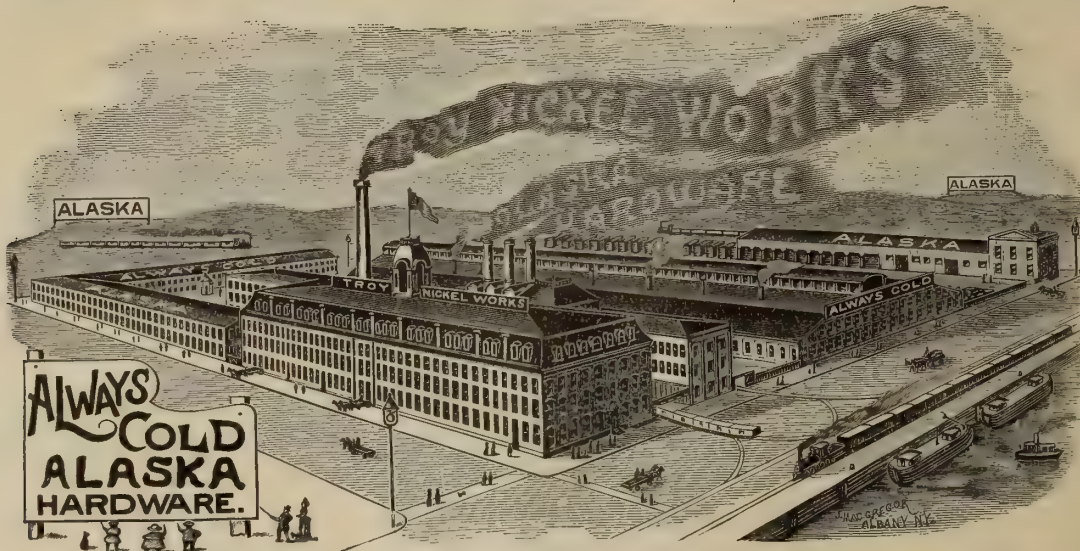
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send to us for prices. We will land
the goods at your door. WRITE US
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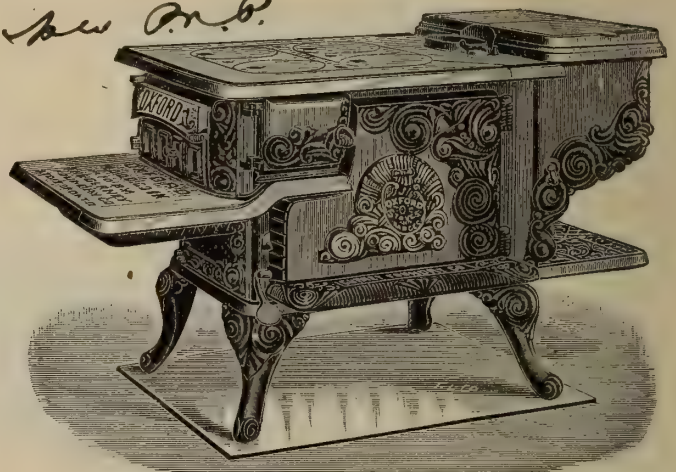
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Wood Cook

is the leading favorite among moderate priced stoves all over the country. We supply it in 4 Sizes, with or without the Reservoir and High Shelf.

It is a splendid working stove with a roomy oven and good fire-box. Uniform wear and great heat to both oven and reservoir are secured by having this heavily tinned copper tank heated at the bottom only, no part of the sides being exposed to the flames.



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BARBED WIRE OUTLOOK.

THE future course of barbed wire values is occupying a lot of attention in trade circles at present. This has been aroused by the numerous enquiries that commission houses, representing mills at Pittsburg, have received of late asking for quotations for delivery after the first of the year.

As is well known, barbed wire, and the plain galvanized wire from which it is made, enters free after that date, hence the enquiry above referred to.

At present the jobbing price in Montreal, Toronto and other leading points is \$2.30, but it is certain that this will be modified after the New Year. One thing is beyond doubt if leading makers are sincere in their assertions, and that is that after the first of the year there will be no barbed or galvanized wire, which constitutes its raw material, manufactured in Canada.

This means that two important departments of the leading wire manufacturing plants in Canada will be shut down, as they cannot compete with the enormous Pittsburg concerns. In fact, it is reported that several of them have already entered into

negotiations with the idea of acting as simple jobbers of barbed and galvanized wire after the turn of the year. It is possible, also, that other lines of wire, though still protected by a duty, may seriously feel this competition of free barbed and plain galvanized wire. The cost price at the mill, for instance, of plain annealed and oiled and annealed wire is \$1.68 to \$1.70.

It is not likely at present that barbed or galvanized can undersell this figure, but if they do it means that this item will have to decline also. Altogether the turn of the year is awaited with considerable interest by dealers in wire.

The enquiry that commission men are experiencing at present regarding American barbed wire is solely from jobbers in the country. The trade in the big centres, like Montreal and Toronto, have, they assert, made no move in regard to supplies as yet.

CUT NAIL PRICES.

THE United States cut nail pool has gone the way of that in wire nails, which broke up several months ago.

Last week the cut nail arrangement ceased to exist, a Wheeling mill offering cut nails in New York on the basis of \$1.18 at the mill or \$1.33 delivered. This is away below the regular pool basis.

It is not believed by Canadian makers that the new development will have any influence on prices in this country. At present cut nails are selling at \$1.28 Pittsburg, and when the freight charges and duty are added it brings them away above the cost price of the Canadian nail, which at present is \$1.65 at the mill in carload lots.

THE RECIPROCITY QUESTION.

RECIPROCITY between Canada and the United States is again being revived somewhat, although it is by no means yet a live issue.

An interesting feature of the subject is that the present movement had its origin in the United States. In official circles, as well as in the columns of the newspapers, there has been some consideration of the question lately.

Only a few days ago a despatch from Washington said that the Government was favorably considering the question of recurring to the system of reciprocity for encouraging commercial relations with Canada. The despatch also pointed out what is already known, namely, that Mr. Kasson, who has been specially charged with the arrangement of reciprocity plans under the Dingley tariff, is favorable to closer trade relations with Canada.

Now, on this side of the line interest has again been partially revived in a question which for some time has been as dead as the proverbial door nail, by the presence in Washington of Sir Wilfrid Laurier and Sir Louis Davies, who, while there, primarily in regard to the seal question, will not, we are told, turn a deaf ear to any just proposition for reciprocity.

The last and only purely trade treaty Canada had with the United States went into operation in 1855, and was terminated in 1866 by the action of the United States. This treaty, in the main, provided for mutual rights of fishing in certain Canadian and United States waters, for free interchange of the products of the sea, the soil, the forest and the mine. Since then several

attempts have been made to establish another treaty, but the opposition of the United States Senate has always been an insurmountable obstacle. True, the Treaty of Washington was signed in 1871, but it had nothing to do with commercial matters, and the fishery clause of that treaty was terminated in 1886.

Canada has never been averse to a reciprocity treaty with the United States which was reasonable and just. On the contrary, we have in years past been too anxious in the matter. Instead of acting the part of men, we have at times been little short of mendicants in importuning for what a good many people imagined to be a necessity to our very existence.

The welfare of one nation does not depend upon the will of another; it depends upon the energy, intelligence and patriotism of its people. Canada has learned at least the rudiments of that lesson.

We have learned, at any rate, in spite of a practically stationary export trade with what was at one time held to be our best customer, that our sales abroad have continued to expand.

Since the McKinley tariff went into force the aggregate export trade of the Dominion has increased in value over 23 per cent.; and the McKinley Bill, a good many imagined, would wreck us.

This increase has not been due to an expansion in either one or a few lines. All have shared in the increase. The products of the mine, the fisheries, the forest, animals and their products, agricultural products and manufactured products, are all exported in larger quantities. At the same time, however, it should be noted that while the exports of agricultural products in 1896 were larger than during the year which preceded the McKinley bill, as well as the year it went into operation and the subsequent one, they were not as large as in 1892, 1893, 1894 and 1895.

Of course, the increase is chiefly on British account. In 1890, the year the McKinley bill went into force, the percentage of our exports of home products to Great Britain was 48.67 per cent., and that to the United States 42.48 per cent. Last year the proportions were 57.06 and 34.57 per cent. respectively.

Although the proportion to the total

exports of all other countries grouped under one heading was scarcely as large in 1896 as in 1890, yet the value of the quantities sent them was nearly two million dollars greater.

It is thus evident that as a customer of the Dominion the United States has of late years been gradually getting less important. Quite naturally we have no desire to have this continue. A country as well as a merchant would rather that each customer should increase rather than decrease its purchases.

But Canadians are by no means in the spirit to importune for a reciprocity treaty. Indeed they are not willing to take even the first step in the direction of negotiating in the matter. Time and again has this country taken the first step only to be kicked back two.

If the United States desires a commercial treaty with Canada let it come to us; and a fair proposition will receive fair and courteous consideration. For the Dominion Government to make any advances would be decidedly unpopular, to say nothing of being impolitic. Sir Wilfrid Laurier and Sir Louis Davies would do well to remember this.

If, as the despatch says, the United States Government is favorably considering the matter, well and good. If not, Canada's duty is to wait until it is so disposed.

THE LATE MR. BROOKS.

THE wholesale hardware trade of the country learned with great regret this week of the death of Mr. Thos. Brooks, the managing director of the Peterborough Lock Co.

The late Mr. Brooks was a warm personal as well as business friend of most of the leading jobbers. The trade, as a whole, feel that his death removes a strong personality and a man who always had the best interests of the hardware trade at heart.

The direction of the Peterborough business has been in Mr. Brooks' hands for the past twelve years, and his company was the first to manufacture in Canada an extensive line of builders' hardware. Mr. Brooks was well equipped for the business he controlled, having acquired an extensive acquaintance with it in the employ of Parker, Whipple & Co., of Connecticut.

THE PREFERENCE QUESTION.

BASED upon the principles of justice, no one creditor should have a preference over another in the distribution of an estate. That such is not now the case is one of the strongest reasons why there should be an insolvency law for the Dominion.

The giving of one creditor preference over another is wrong in principle. It was conceived in the attempt of one creditor to secure himself at the expense of another, and induces people to loan their goods or their money to persons who in many instances they know to be unworthy of credit. The practice of giving preferences is the credit system gone mad.

But aside altogether from the moral aspect of the question, there are other points from which a law forbidding preferences can be viewed.

There are, for instance, the rights of the creditor who has not been able to protect himself with a chattel mortgage or some other description of security.

But the paramount influence at the moment appears to be the desire to protect the interests of the creditor class in Great Britain, whose distance from the Canadian market has resulted in their commonly being the victim of the preference evil.

By our preferential legislation we have intimated to the British manufacturers and merchants that we desire to deal more extensively with them in the future than we have in the past. And certainly, if we are honest in the matter we should be just, as well, and exhibit our sense of justice by removing what is undoubtedly an obstacle to British trade with this country.

On account of the practice of giving preferences the British creditor has more than once suffered, and that severely. On account of this those thus victimized naturally have not a very high opinion of the commercial morality of Canadian business men.

A well-known Canadian who has been in Great Britain for some months writes: "I find a strong prejudice against Canadian business men; but I am sure it would vanish were an insolvency law enacted in which preferences were prohibited."

It is a disagreeable duty to publish statements of this kind; but our only object in

doing so is to stir our people up to a sense of their duty and thereby induce them to strengthen the hands of those who are championing the cause of a Dominion insolvency law, which will not only minimize the chances of British creditors not being paid, but of Canadian creditors as well, whose business ramifications extend from one end of the Dominion to the other.

In the slaughtering of prices merchants sometimes kill themselves.

LOW-PRICED BICYCLES.

WITHIN the last fifteen months many thousand bicycles have been retailed at prices previously unheard of. This has given most people the impression that prices have fallen very greatly. They are, undoubtedly, lower on the average than ever before, but, quality considered, there is not yet so great a reduction as is commonly thought.

Nearly all the wheels that have been sold at very low prices have come from concerns who were in financial difficulties, or the machines were composed of parts made up in the cheapest possible manner, for the

express purpose of catering to the low-priced trade. Purchasers who secured the former often obtained genuine bargains, for some of the goods were really cheap. Those who bought the latter rarely got their money's worth, for the goods were merely low-priced.

The difference is a genuine one, not a mere distinction of word. The well established makers, who build high-class goods, have not, as a rule, made any material reduction in price on their output for the current year. Most of them, however, carried over stock from 1896 and have sold it through their regular channels at considerable reductions. This year they claim to have been much more conservative in manufacturing, and do not expect to have any quantity of 1897 goods to sell at reduced prices in 1898.

To some extent, however, the other conditions that have obtained this season are likely to be repeated in 1898. So many firms are engaged in manufacturing that over-production is not improbable.

It is not likely that all makers can bear the financial strain. Some will go to the

wall, and their stock will be sacrificed. Then, too, there are still many who think they see profits in assembling cheap parts into wheels for bargain counters.

As long as these conditions last, there are likely to be enough low-priced wheels for all who want them. But there will also be more and better honestly-built, cheap wheels than ever before.

Indications point to some reduction in prices all along the line, or, where figures are not reduced, to increased value for the prices asked. Improvements in methods of manufacture and reduced cost of nearly all the component parts of a wheel are making this possible. The one-hundred-dollar price, however, is likely to be a thing of the past, as some have confidently predicted.

There are many wheelman ready to pay the price if they can be assured that they are paying it for "value received," and there will be a sufficient number of makers glad to cater to the demand. The manufacturers, as a rule, have not yet decided on their prices, but better value than ever can be looked for another year.

THE ONLY WAY

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it.

The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

TAKING STOCK.

ONCE a year the machinery of trade should, writes "A Merchant" in Iron Age, be stopped in order that the condition of affairs may be obtained. Stock-taking time is observed by all tradesmen with scarcely an exception.

Some of the smaller merchants may perhaps conclude it an unnecessary task, as they know how they stand and can size up their goods upon the shelves at a glance. But even the very smallest merchant can with advantage to himself carefully go through the process.

He may reason that his goods are all paid for, that he has no creditors, and what cares he about stock-taking. He will be no richer by it, and it means some work. We are not so sure but that he may learn something from it which will be dollars in his pocket during the next year.

TAKE STOCK OF THE GOODS.

There are other things to be inventoried and valued besides the stock, but this is the most important and should come first.

Every article of merchandise in the store should be counted, or weighed or measured, and entered in a book with the cost price and the amount of its value found. This book will be a handy one to refer to in the future when new goods are required. The prices should be the actual cost of the goods when bought, with expenses of shipment added, with this exception—if goods are lower in price than when bought, the lowest price should be taken.

ADVANTAGES.

It is the only safe way, as many men deceive themselves by invoicing their stock too high. Stock-taking is not only valuable to the merchant to aid him in finding out his real net worth, but it has other uses every business man cannot fail to recognize. It serves to bring to his notice shelf-worn goods which have lain long upon their places and have depreciated in value. By having his attention called to them he will readily see the necessity of getting rid of them as soon as possible. Dust and dirt can be removed, and broken packages tied up and the goods rearranged in an attractive manner. The goods that have been slow sellers in the past can be placed where they will be constantly in sight and thus more frequent sales made.

DEAD STOCK.

By reference to the invoice book it will be noticed that some goods were bought perhaps one, two or three years ago, showing that there have been errors made somewhere, either in the quantity or price bought at, or non-attention in pushing goods which only sell once in the year. This handling of the stock will show among other things

the importance of buying with the utmost care in regard to quantity. Goods can be ordered quickly, and the necessity of buying largely does not now exist with the facilities of telegraph and express at the present day. Dead stock is responsible for more failures than any other one thing. The beginner in business is most usually apt to err in excessive buying. But his care should be to buy as sparingly as possible, as in most instances his capital is limited, and he needs to beware of locking it up in unsalable goods.

He needs to cautiously feel his ground and buy only what sells. Hence the annual stock-taking will reveal to him his mistakes in this regard.

TAKING STOCK OF THE ACCOUNTS.

We use this phrase in the same sense regarding the accounts on the ledger as the goods upon the shelves. The names of the merchant's debtors will bear careful scrutiny. In scanning the pages of his ledger he finds customers specially desirable. These he must take pains to give the very best attention in every particular. They must be promptly waited upon and their goods delivered in the shortest time imaginable. They must be used well, and if they have complaints these must be settled in a ready manner to their entire satisfaction, even if the concession made means an actual loss on the transaction. The slow paying and undesirable customers must also have a little consideration. They must pay more for their goods than those who cause the merchant little trouble in collecting. Some may think this is not just right. But we think that the people who buy goods and keep the merchant unnecessarily long out of his pay and cause him no little bother and annoyance to settle have a proper right to pay the highest ruling price. If they complain, explain to them that you would gladly give them a discount for prompt and immediate settlement.

But the merchant needs to not only consider the prompt and slow pay customers, but those who are doubtful and may never pay. The ones he has the least doubt of should be put into suspended accounts and not considered as a good asset of the business. If there are more than there should be, let him recall why such is the case, and watch this part of the business more closely in the future.

SHOULD TAKE STOCK OF HIS PROSPECTS.

Has he made some progress during the year? If so what are the probable indications for future prosperity and gain? It is not wise to be too sanguine over the future because last year was good; neither is it the right thing to be discouraged because the future shows no bright prospects. By looking at the past and the success therein

attained, may we not hope for larger gains in the future, considering that the experience of the past, if rightly weighed, will give additional capital for the future? The records of every business year should contain material for the thoughtful merchant to supplement his efforts in his upward climb of prosperity. He should not be so narrowed by the perplexing details of his business that he cannot forecast to a certain extent the probable conditions which will prevail next year in his constituency. The successful merchant is able to look into the future, and will lay his plans in advance.

FAILURES.

The failures of the past year need to be viewed from different standpoints. Of course there have been failures. Not only failures to pay, but there have been mistakes made in the conduct of the business. Perhaps some good customer has been lost and proper steps were not taken to hold him or to win him back again. Perhaps some creditor was not promptly paid, and your credit was just a little affected. These and other matters will bear a little wholesome thought, and resolves for more careful consideration in the future.

THE CLERKS

will come in for some consideration at this annual polishing of the munitions of war. The help of an establishment contribute no small share to its success. So they should be carefully scanned to see that each one is doing as well as he can. If there are any among the staff who seem not to be up to the standard of merit, investigate the cause. Is the fault with them or with the proprietor, or are both a little to blame? If it is decided that a certain clerk is a positive injury to the business, he should be got rid of at the first opportunity. But do it in an honorable way by fully explaining the reasons and by giving him ample notice. Be sure that no mistakes are made, as often there is jealousy among the clerks, and the bold and tricky fellow, who may possess little real worth, will use every means to get his more humble fellow into disgrace with the proprietor. A sharp eye should be kept on the help, and when merit is seen it should be encouraged. Strive to make the men more valuable to the business and also to themselves by consulting with them about the affairs of the store and getting their opinions of proposed improvements which may be contemplated.

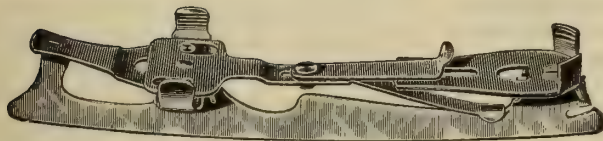
If clerks are taken a little into the confidence of their employer and his interests, and made to feel that their individual success is closely allied to the welfare of the business, and that honesty and faithful performance of duty is appreciated by their employer, there will seldom be found occasion for him to complain of their inefficiency.

H. S. HOWLAND, SONS & CO.

Wholesale Hardware
Merchants

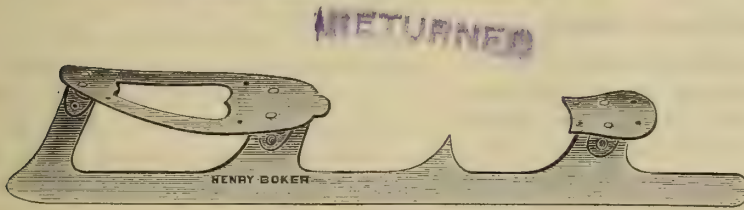
37 West Front
Street,

TORONTO



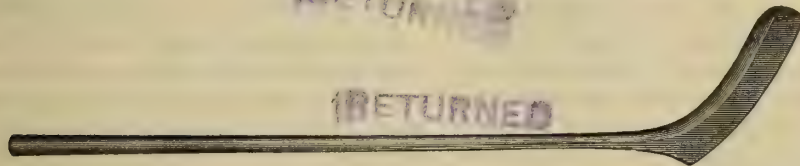
HALIFAX PATTERN SKATES

Large Assortment
All Sizes, 7 to 12½ inches.



HOCKEY SKATES

Large Assortment
All Sizes, 8 to 12 Inches.

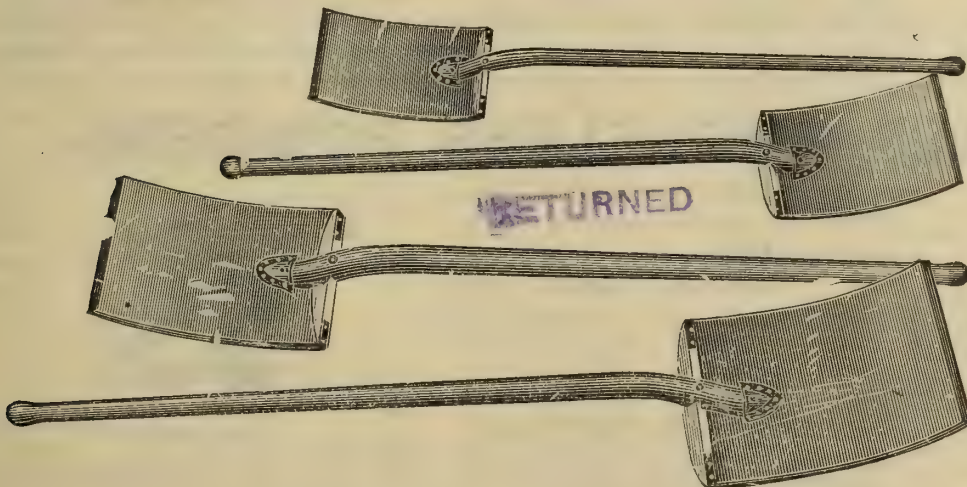


HOCKEY STICKS

All Qualities.



STEEL SNOW SHOVELS



WOOD... SNOW SHOVELS

"Favorite"

All Sizes.

Graham Wire and Cut Nails are the Best.

H. S. HOWLAND, SONS & CO. - TORONTO

Orders Filled Promptly.

Our Prices are Right.

5 Cuts

Nov 19/97

AN INSANE BUSINESS PRACTICE.

By David.

THERE is a prevailing idea that the majority of the managers of wholesale paint and oil firms are pretty shrewd business men. Let us hope that the houses given to the following insane methods of doing business are decidedly in the minority and that, for the benefit of all concerned, their number will "grow smaller and smaller, and more beautifully less."

A commercial traveler of repute, representing a large wholesale grocery firm in Ontario, relates his experience as follows: "I was driving, during the summer, through the County of Waterloo and, calling in one of the most prosperous villages, I displayed my samples of rich Mocha, Old Government Java and choice Lal-Ram tea and Acadia granulated before the merry eyes of my Pennsylvania-Dutch customer, whom we will call Mr. Dinkelpender. After growing eloquent on the virtues of my full-strength-up-to-date-anti-pyroligneous vinegar for making 'sauer-kraut,' Mr. D. said:

"Mine frent, Allspice, I vill gif you an order provided you take back all dose canned goots vich I have mit me dree years all-the-vile, and mail a gretted note chust the same as I pays!"

"Mr. Allspice vowed he could not exchange good, fresh groceries for shop-worn, three-year-old, antiquated tinned salmon and green corn, and demanded an explanation.

"The worthy storekeeper explained that he lately made an exchange of the whole of his stock of ready-mixed paints to a Toronto manufacturer, who replaced it, appar-

ently, with a fresh line, or probably some newly labelled rubbish that had been transferred from some other dealer who, by making the 'trade,' thought he was getting a bargain.

"Our tea and coffee salesman respects his situation as well as his reputation, and refused to do business in such a slipshod fashion.

"I investigated the above and found the facts strictly correct. In some instances the exchanged product has been resold in the same or neighboring towns at 60c. per gallon, the buyer of the job lot in turn selling at \$1 per gallon to the demoralization of trade, seeing the retail price should be \$1.40 to \$1.50 per gallon."

A HARDWARE MAN.

There was once a hardwareman who was determined to set up an image of a human being in his store window. He looked about his stock, and, finding all the needed material, went to work, and his efforts were crowned with an unquestioned success. He took the legs of a stove, the teeth of a rake, the ears of a pail, the elbows of a stove-pipe, the tongue of a wagon, the nails from a keg, the fingers of a cradle, the head of a hammer, the nose of a tea-kettle, the hands of a cyclometer, the hair of a brush, the eyes of a needle, the bottom of a tub, the neck of a bottle, the arms from his gun department, the joints from a two-foot rule, from which he also stole the feet, the back of a refrigerator, the heel of a scythe, and the cheek of his traveling man. He was a little uncertain as to the "skin," but, after a moment's thought, decided to give that part to the fellow next door.—Hardware.

INCREASED NOVA SCOTIA COAL OUTPUT.

Mr. Henry Budden, vice-president of the Intercolonial Coal Company of Pictou, N.S., has returned to Montreal from a business visit to the mines. Mr. Budden, while discussing the outlook, stated that a great change for the better had taken place, and more particularly within the past two months. Up to August there was very little indication of the happy change just referred to, but since then the orders have been rapidly coming in, and Mr. Budden takes this as a pretty good indication that business generally has greatly improved. There are now nearly 500 men and boys at work at the mines, and the output is about 1,000 tons per day. Work has, in fact, been going on without stopping a day for the last four months, and it is expected that at least 600 tons will be the daily output during the coming winter. Mr. Budden added that the other Nova Scotia coal mines appeared also to be reaping the benefits arising out of a general revival in manufacturing and other business.

LAND AS WELL AS WATER BOAT.

A boat, made especially for travelers going into the Klondike regions, arrived in the C.P.R. yards yesterday and was the object of much curious interest. It is about thirty feet in length, has small cabins and will accommodate about thirty people. It was oval-shaped on the lower part, but had wheels with rudder-like attachments, so that it could be drawn over dry land with ease or propelled in the water. It was ingeniously built in every particular and the owners evidently intend to surmount all difficulties and get to the Klondike with ease and comfort.—Free Press, Winnipeg.

THE "IDEAL" SMOKELESS POWDERS

FOR GAME AND TRAP SHOOTING.

"SHOT-GUN RIFLEITE"**I. B. S. A. CHAMPIONSHIP MEETING**

Wembley Park, June 8 to 12, 1897.

LEADING PRIZES won with "SHOT-GUN RIFLEITE," including the

DOUGALL MEMORIAL TROPHY,

Value £75.

GUNMAKERS' ASSOCIATION PRIZE, THE NOVICES' AND VETERANS' PRIZE,

Value £15.

THE RIFLEITE CUP

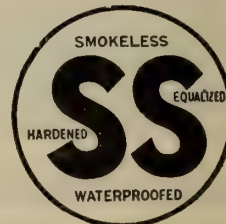
Fell to Mr. D. O'Connor after 45 BREAKS WITHOUT A MISS. Strong testimony in favor of the excellence of this Powder.

**Lord Ashburton on
"Shot-Gun Rifleite."**Extract from Letter to Editor of The Field:
See Field, May 15th, 1897.

"I used this powder (Shot-Gun Rifleite) all last season and thought it wonderfully good, both in its hard-hitting qualities and regularity. Out of many thousand Cartridges I never found any symptoms either of weakness or undue strength; and I have recently used the same powder in Egypt and the Malay Peninsula, and found that the great heat in those parts in no way affected it."
(Signed) ASHBURTON.
9th May, 1897. 42 Grosvenor Square, W.

MR. HENRY SHARP

The well-known expert on Wild Fowl Shooting, writing to The Field, says:
"Shot-Gun Rifleite is a powder that is known to be very quick in the barrel and to give very high velocities afterwards."



NEW ISSUE, 1897—S.S. has been greatly improved this year. The 1897 issue is a distinct advance on all previous issues, and will hold its own with the best nitros now on the market. TRY IT AND SEE.



Retail in Canisters or Cartridges from all Ammunition Dealers and Wholesale from the Sole Manufacturers,

The Smokeless Powder Co., Limited., Dashwood House, New Broad Street,**WORKS—BARWICK, HERTS.****LONDON, E. C.**

ORIGIN OF KRUPP STEEL WORKS.

THE Krupp Steel Works at Essen, Germany, were founded in 1812 by Friedrich Krupp, grandfather of the present owner. He began in a small way with a small capital to manufacture cast steel, and discovered, after many years' experimenting, a new method of making it. But he died young, and his son, Alfred, then a boy of 14, assumed the task of extending the works upon the early death of his father, who was not yet 40 when he died, in 1826. During the long life of Alfred Krupp his name has become a household word. Ceaselessly the Krupps made one improvement after another in the manufacture of their goods, but it was particularly in heavy ordnance that they began to excel, little by little, every other firm in the world, so that as the years went by orders came from every quarter of the globe.

When Alfred Krupp died he left such an establishment as did not exist anywhere else. His son Friedrich continues on in the same path, and has made some adventures of gigantic size since his accession. The shooting places, where the artillery experts of the world come from time to time to test new types of ordnance invented or improved by Krupp, are the largest in the world, notably the one at Keppen, near Essen. It was there, in the presence of the German Emperor, that a shot was fired out of a twenty-four centimeter gun whose steel-clad shell, weighing nearly five hundred pounds, was projected a distance of over fifteen English miles, a feat at that time unrivalled. But later the Emperor witnessed tests even more astonishing, the longest distance reported being a few yards more than fifteen miles, the shot weighing 2,600 pounds.

Iron workers throughout Germany consider it the highest possible favor to get work with Krupp, as he pays the highest wages, never imposes on them in regard to overhours, and he looks after the welfare of his men and their families as a kind father would.

PILOT BAY SMELTER.

The concentrator at the Pilot Bay smelter has not yet started up. Mr. William Braden, one of the proprietors, says the sampler and concentrator will probably begin operations some day this week. He would not state just when the smelter would now in, but it was already commencing to receive ore from their own mines, the Tariff, the Ainsworth, the Bluebell, on the peninsula, and the Lucky Jim on the K and S, then they are getting ore from one outside mine, the No. 1 at Ainsworth. They are employing from 22 to 25 men on the Lucky Jim, on the Tariff 20 men, and on the

Bluebell, 20 men. They have contracts with a number of other mines to supply the smelter with ore, but for business reasons Mr. Braden preferred not to name them. When the concentrator begins work there will be 40 to 50 men at Pilot Bay. The matte and bullion products by the smelter will be sent to the Omaha and Grant smelter.

Since the work of renovating the smelter began things have received a decided impetus at the Bay. Not a house is for rent, where there were formerly dozens, and any number of stores have started up and are doing well. The purchasing of the Pilot Bay smelter by the Braden Bros. was a good thing for a large number of men of family.

PRACTISING FOR THE YUKON.

In view of the expected exodus to the Yukon district in the spring, it is said that a number of young hardware salesmen in the "Ambitious City" have got together to form an association to be called "The Excelsior Klondike Club. For practice during the coming winter every effort will be made to scale the Hamilton mountain.

The first attempt will be by the pass which is locally known as "The Jolly Cut." and then, if successful, the escarpment will be climbed by the Falls of Chedoke, past Glenfern, and a path traced to the nearest hostelry, where arrangements will be made to refresh the aspirants for Alpine honors and afford succor to any member of the club needing attention.

To ensure safety the rules emphasize that not less than three climbers must start at one time, equipped with alpenstocks, and it is proposed to reduce the chances of accident to a minimum by connecting each member of the party together with Silver Lake sash cord. A striking snowshoe costume, I am informed, has been adopted with the regulation knickerbockers, French-Canadian "toque" and calf-faced mitts.

A goodly number of invitations will be issued to see the first start of the club, which it is expected will be from the Gore, and much enthusiasm over the venture has been aroused locally.

BRADAWL.

AN ARITHMETICAL PROBLEM.

There was a hardware dealer sold a customer some wooden ware, and billed him as follows:

To 2 rolling pins at 10c	20c.
" 1 wood do.	10c.
" 1 wooden do.	10c.
	40c.

The customer paid the dealer ten cents, received a receipt in full without dispute on either side. The settlement was perfectly fair and without abatement or reduction on the part of the merchant.

BUYING STOLEN GOODS.

At the Winnipeg Assize Court last Saturday, Mr. Bernard Schragge was charged with having bought copper trolley wire belonging to the Winnipeg Electric Street Railway Co., "well knowing the same to have been stolen."

The principal witness, Mr. Glenwright, chief conductor of the street car company, said that he called on Mr. Schragge, who showed him the wire he had bought, and in no way tried to hide the wire or to deceive him. Mr. Schragge said that one of his men bought the wire, generally from boys, and as usual the man marked the price paid on a piece of paper, when he, himself, entered it in his books.

A boy testified to have sold in Mr. Schragge's shop some wire, but had no conversation in regard to the wire with Mr. Schragge.

The presiding judge, Chief Justice Sir Thomas Taylor, said that no case had been made out as would warrant him in submitting it to the jury, so a verdict of not guilty was rendered under the direction of the court.

HAMILTON FOUNDRIES BUSY.

A representative of John Milne & Co., Yonge street, was in Hamilton this week, and reports that all the foundries there are running full blast and are barely able to keep up with orders. The condition of the stove trade is such as has not been the case for a long time, every foundryman feeling it and trying to make the most of it. The smelter is very busy also.

CLEANING ALUMINUM WARE.

One reason why aluminum utensils and other ware have not found more favor with the general public is, in all probability, because the proper method of keeping the ware in order has not been known. A New York firm, who handle a very large line of aluminum goods, advise The Metal Worker that they have only lately discovered that the preparations which are generally used for cleaning silver are inimical to aluminum. Soda or ammonia, in particular, should never be used for the purpose. Polished aluminum ware in general use should be cleaned with plain water only, a little fine sand being employed in case the inside of the article becomes dark from the food. If the outside becomes dull special aluminum polish, with a little whitening, should be used. Satin or frosted finished articles should be cleaned with soap and water when soiled. If these directions become known they believe that aluminum cooking and table ware will become more appreciated by the public.

REFORMS THAT FAILED TO REFORM

I FOUND a hardwareman the other day who, as a reformer of his own methods, was confessedly a failure, and yet he was the most cheerful man I ever saw, writes "G.W.," in *Hardware Dealers' Magazine*. He even chuckled as he recounted his efforts to adopt some of the innovations of the hardware trade.

"No, sir," he said, "I'm simply a plain, every-day merchant. There's no fringes on me. I tried to get some once, but I didn't do it and I've stopped trying now."

"You don't look as if you needed any fringes," I said, for his store was prosperous in appearance.

"Oh, well," he said, "I thought I did once, but I don't any longer."

"What changed your ideas?" I asked.

"I didn't have any luck with my attempts," he said. "Fell flat on 'em every time. Then I stopped makin' 'em and settled down."

"Never told you how I got slumped when I tried to stop delivering goods, did I?"

He never had.

"Well, it was about three years ago now. I had a pretty good delivery man, and I paid him \$12 a week. Then my horse cost me a good deal, and, all told, I don't believe my delivery service stood me in much less than \$15 or \$16 every week. Well, I got to thinkin' one day, and decided that it was money wasted. So, to make a long story short, I issued a statement that no more goods would be delivered, and as an inducement to balance against this I reduced all my goods 5 per cent. I could afford to do so, you see.

"Well, the scheme didn't work. I lost some trade by it the very first day, and the second day some workmen at the hospital about a mile out here, where I've always sold goods, came and ordered about \$15 worth of tools. I told them I didn't deliver any more, and one of them said: 'Well, we'll have to go somewhere, then, where they do deliver, for we can't carry the goods ourselves, that's certain.' Well, what did I do? Why, I give up, that's what I done, and I've delivered goods like a little man ever since.

"That's reform No. 1. Then I used to be overrun with bums—loafers that used to come in the store and spend the whole evening. I knew it was a hurtin' me, but I didn't know how to get rid of 'em, so I made up my mind to take a firm stand. I came out one night and made a regular little speech. I told 'em, while I liked 'em personally, and would be glad to have 'em come to my house at any time, they were hurtin' my business, and would

have to clear out, or words to that effect. They got out, but they was madder 'n wet hens, and I knew they'd be up to some foolishness or other; and what did they do? Why, my daughter was sick in bed with the mumps, and these fellows started the report that she had the small pox. Why, the first day that got about the town I didn't have two customers. Why, it hurt me awful; but I couldn't stop it. As fast as I'd deny it, these fellows would tell around that I didn't want to have to close my store because I'd lose so much business."

"What did you do?" I asked.

"I'll tell you what I done and you'd a done the same thing if you'd a been me. I went to those fellows and asked 'em back in my store again. It was a crawfishin' thing to do, but I had to do it because I was losin' my trade. There was so many of 'em that I couldn't get the report out of the way. But when they came back it all died out in a few days; and if you're here Saturday afternoon you'll see 'em a sittin' right around the stove. That's how I got stuck on reform No. 2.

"I believe that's all the things I ever tried—no, wait! I read a piece in some paper once that women clerks was the best sort to draw trade, and I put in one. She was a likely sort of a girl, about 35 years old—Mandy Smith. Know what Mandy done? Before I'd had her two months she told all around town that me and her was engaged. I'm a widower, you know. Why, every man I'd see on the street would run me about it, until I was afraid to go out. The papers all had it in, and I was miserable. That woman would just sit and grin when she was asked about it—I saw her one night. Well, I had to discharge her, and then she started a report that she'd jilted me. Never even asked her to marry me! You bet your boots no woman comes in here to pester me again. They've got no business in a hardware store, anyhow. Let 'em stay at home and mend stockin's."

"No, sir," he went on, "the old-fashioned hardware business is good enough for me. I don't want no fringes on it, either. I've made a livin' out of it for nearly twenty years, and I cal'clate to make a livin' out of it for that many more if I'm spared, and that without any hifalutin' nonsense, too."

FOUND TRADE GOOD.

Mr. H. T. Carswell, secretary-treasurer of the Ontario Malleable Iron Works, Limited, Oshawa, Ont., has been visiting the trade in Western Ontario, and he reports business good and the outlook promising. The new large moulding shop of the company, being built to replace that destroyed by fire, is now nearly completed and is being utilized to some extent.

EXPORTS OF BRITISH RAILS.

The exports of rails from the United Kingdom were well maintained in September. According to official figures, they reach for the month 36,214 tons, as compared with 34,221 tons in September, 1896, and 39,793 tons in September, 1895. Deliveries to South America have fallen off; the shipments have, however, increased to China, Japan and Egypt. Shipments to South America in September amounted to 1,346 tons, as compared with 502 tons in September, 1896; to British India, 13,090 tons, as compared with 12,861 tons; and to Australasia, 3,053 tons, as compared with 2,430 tons. The aggregate exports of rails from the United Kingdom in the first nine months of this year were 441,196 tons, as compared with 445,490 tons and 289,740 tons in the corresponding periods of 1896 and 1895 respectively. British Africa took 51,407 tons of British rails in the first nine months of this year, as compared with 22,182 tons and 10,036 tons respectively; British India, 216,921 tons, as compared with 194,627 tons and 108,545 tons respectively; Australasia, 57,601 tons, as compared with 49,662 tons and 31,886 tons respectively; and British America, 9,177 tons, as compared with 37,199 tons and 29,762 tons respectively. The increase in the shipments to British India will possibly be regarded with some surprise, in view of the troubled condition of that great dependency all through 1897; probably, however, famine difficulties had the effect of inducing the Anglo-Indian Government to proceed with railway construction with sustained energy and vigor. The Argentine Republic took 38,004 tons of British rails in the first nine months of this year, as compared with 57,290 tons and 7,231 tons in the corresponding periods of 1896 and 1895 respectively. The shipments to Japan to September 30 this year were 40,473 tons, as compared with 41,055 tons and 20,929 tons respectively; and those to Egypt, 31,539 tons, as compared with 13,634 tons and 10,719 tons respectively.

COMPETITION FOR B.C. ORES.

American ore buyers in British Columbia have now to meet the competition of foreign concerns, which may interfere with the practical monopoly that certain of them have had on some of these ores. Vivian & Sons, of Swansea, have recently appointed an agent in Vancouver who is said to be offering higher prices for copper ore than has been paid heretofore in the American market, and will advance 75 per cent. of the value of consignments as determined by assay in Vancouver. Several lots of ore have been sent already to Swansea on these terms.—*Engineering and Mining Journal*.

ABOUT JAPANNED WARES.

"THE day seems to be past when many articles in which hardware merchants deal were made of plain metal without an added finish by way of enamel, japanning or combination of two metals in conjunction with one another," remarked a hardware merchant to Stoves and Hardware Reporter. "In the past a hardware store could hardly be said to have been very picturesque or pleasing to the eye, as most articles were made of either sheet iron or tin without embellishments of any kind. Now all these appliances, as well as the cooking range itself, are really artistic and may be had in quite decorative finish—that is, if intending purchasers are willing to go to some extra expense in order to obtain high art coffee pots, five o'clock tea-kettles, etc. Undoubtedly, the more desirable an article becomes in the way of improvements and decorations the more expensive it is in proportion.

"One of the kinds of metal covering which has been popular for a long period and bids fair to continue so for a long time is japanning. It is very useful, and when carefully and properly done will preserve metal surfaces thoroughly; when it is done by an incompetent individual it will not preserve the metal or look well either. Too great haste in doing the work may be the cause for much of the defective wares put on the market. The surface of the metal which is to be japanned should be carefully prepared; it does not require such an extensive polishing as when different portions are to be plated, yet the surface should be rubbed down until no rough places are left. In many cases a color, maroon for instance, is used, though by far the most popular is black.

"Good quality of japan varnish is rather expensive, but desirable ends cannot be gained by inferior means, and if an attempt is made to do the work right, it would be false economy to buy cheap materials which are liable to spoil what has been done previously. In the application of japan varnish the articles must be baked in an oven raised to high temperature. Great care should be taken at this point or the excessive heat will cause the metal to lose its shape, and preclude the use of japan as a finish entirely. It is not common for the metal to do this, but it is well to know what accidents may occur in order to avoid them. Other accidents may happen which are difficult to avoid. If the heat is more than 300 degrees it will cause the coating to become brittle, and it will come off easily.

"Everybody has doubtless noticed articles in japanned ware with long scales and portions knocked off—excessive heat in the japanning process is the cause of it. The

Two Years Ago

on the first day of November we began making
THE SHERWIN-WILLIAMS PAINTS in Canada.

We have done very well here during that time—this year we are only a little short of **doubling** the sales of our products over last year.

We have demonstrated beyond a doubt that there is a market here for the very best grade of paints; that a firm making only one grade—the very best—can do a prosperous business here.

In most cases we have helped our dealers to increase their paint business. We can do it in **every** case where a man will take hold with us and use intelligently our methods for getting more business. Our methods get the business—our goods hold it and increase it.

If you want to reap all the benefits from the good times that are now here, you ought to be handling our goods and getting the advantage of our business methods.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

average hardware dealer is not expected to possess a thorough knowledge of such matters, as a rule, and consequently is often imposed upon and asked to pay good prices for inferior material and workmanship. There is no way of seeking redress in the matter, except that of discontinuing to deal with those who sell inferior goods of this kind."

LOOKING AFTER CANADIAN TRADE.

The very interesting and suggestive speech delivered last week at the Walsall Chamber of Commerce by the High Commissioner of Canada, Lord Strathcona, should be well considered by the manufacturers of the Midlands. Undoubtedly there is a splendid future opening out in Canada under the new order of things for almost all kinds of British industries. Twenty years ago Birmingham and the Black Country had a large Canadian trade in hardware, but hostile tariffs and other influences have gradually reduced the volume of business until the Dominion has become quite a second-rate customer. With the revised tariff in near prospect our Canadian trade should grow by leaps and bounds, but in the face of German and American competition business will require looking up.—Hardwareman.

CHEAP PUMICE STONE.

For years the pumice stone sold in Ontario has been "bolted" in New York. It is graded from No. ff to No. 1½, in the same way as sand-paper is graded, according to its degree of fineness. The use to which it is put in the manufacture of piano board, fine furniture, etc., is so delicate that great care needs to be taken in the bolting that the grades must not become mixed, as a few grains coarser than the average would scratch the surface of the wood. Lately pumice stone, not so carefully bolted as the New York article, has been imported from Italy, and though not as good, has materially cut the price of New York pumice stone.

WROUGHT IRON PIPE.

A rather easier feeling prevails in the United States in regard to wrought iron pipe, jobbers in Toronto having been quoted figures about 5 per cent. lower than previous quotations. At the same time, however, our figures on a couple of sizes of wrought iron pipe are higher than a week ago, ¼ to ¾ inch now being quoted at \$2 per 100 feet, instead of \$1.87. The change is due to the keenness of the demand for these sizes.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No. 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

A LONDON EDITOR ASTRAY.

COMMERCE, a journal published in London, England, has some sarcastic reference to Canada and things Canadian in its issue of the 27th ult. An official volume issued by the Ontario Government giving information as to the resources of the province is the text which induces its sarcasm.

"At the present time," remarks Commerce, "when Canada looms so largely in the public estimation, and the craze for Klondike has not subsided, the book, official though it be, should be read with philosophical caution. Our Canadian brothers are uncommonly fine fellows, but with them the praise of their country has become a business. They are also sanguine with the hope of all new nations, and even their most sober utterances are not altogether free from poetry—the poetry of ingrained optimism. Our advice to all who have an idea of sampling the riches of Ontario is to make sure of sufficient means to come back if a personal acquaintance on the spot does not quite equal expectations held out. It is not everyone who is fitted to live in Canada, much less to work hard there."

Canada is thankful for all legitimate advertising she can get. Our chief weakness is that we have not advertised our country as we ought, and thus enlightened British editors who write about Canada and business men and others who, sitting in ignorance in regard to Canada's geographical position and her relation to the British Empire, address letters to "Toronto, United States of America."

Canada as a Dominion is only 30 years of age, but to our disgrace it is only within the last few years that a national sentiment has developed and that we have taken any pride in the rich and varied natural resources with which this country has been endowed. It has been foreigners, principally those from the United States, who have in many instances been the first to reveal these riches and hold them up to the gaze

of the world, and not us ourselves. If "praise of their country has become a business" with Canadians HARDWARE AND METAL is only too glad to know it.

As to optimism, God help us if we have not got it. It was optimism as to the powers of the British people to defeat its foes and "to make the rough places smooth and the valley to blossom like the rose" that made them the masters of the sea and the greatest colonizers the world has ever seen. If optimism is a sin, therefore, we got it from our forefathers. And our blood be upon their heads.

The advice to intending emigrants to take to Canada enough money to bring them back is a gratuitous insult to the Dominion. As also is the veiled insinuation that only a few persons are fittingly constituted to live in Canada.

There are practically only three classes of people this country has little desire or no desire to see step on its shores. The one is the young man who is deported from home by his father to Canada and fed on remittances from the parental treasure box. The other two classes are anarchists and paupers. None of these are "fitted to live in Canada."

What Canada courts most of all is men of brain and men of muscle. If, in addition to brain and muscle, they have money so much the better. But we would rather have men without money than men without brains. In fact the latter, be it known, are "not fitted to live in Canada."

It ill becomes the editor of Commerce, or of any other British paper, to emit venom in the form of sarcasm at Canada or things Canadian. For the position Canada occupies to-day little thanks is due to the Great Britain of years ago. When British politicians would not give a snap of their finger for the land of the maple leaf, Canada clung to the Motherland like the child to the parent who has disowned it. Canada is the important part of the British Empire she is to-day because of her loyalty, because of

her sacrifice, and because of the blood she has spilt, and not because of the loyalty, the sacrifice or the blood spilt by the Motherland on our behalf.

But we have come off more than victors. Not only have we kept Canada for Britain, but we have compelled Britain to recognize and to give Canada her proper place in the Empire. Canada has forgiven the past and yields first place to no part of the British Empire in her allegiance to the Kingdom of Great Britain and Ireland.

MANUFACTURE OF ALCOHOL.

There is a proposition before the Government from the Rathbun Lumber Co. for the manufacture of wood alcohol in Canada. This is a product that is not manufactured in the Dominion. It is used in the States and found to be very cheap and perfectly suited for the manufacture of methylated spirits, such as is not drinkable. The wood alcohol leaves a charcoal, which is disposed of at a profit in the United States for smelting purposes. Up to the present there has been no market for the charcoal in this country, but now it is said that since smelting has developed into an industry in Canada the charcoal might very easily be disposed of.

AN AD. SCRAP BOOK.

Take a sheet of heavy express paper; fold it lengthwise and crosswise; use it for the cover. Then take a quire of manilla wrapping paper, 24 x 36, and fasten it to your cover with about five brass paper fasteners. Cut out all your own ads. and all others that strike you as being good; date them and put the name of the paper on them and paste them into your scrap book. When one book gets full make another. Don't fail to paste in the ads. of your competitors. From this book you may "check up" your ad. bills and know that they are right; and you'll find it a "mighty handy thing" to have around when you have to get up an ad.—Ads.

SLEIGH BELLS

(BACK)

SLEIGH BELLS

(BODY)

SHAFT GONGS**STRAP COLLAR BELLS****TEAM BELLS****M. & L. Samuel, Benjamin & Co.**

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

A FIRE INSPECTOR

reports that more policies covering mills, warehouses, etc., are cancelled by reason of lack of fire pails than by any other reason. And yet it costs so little to equip premises with indurated fibreware round bottom fire pails made by . . .

**The E. B. EDDY CO., Limited****HULL, MONTREAL and TORONTO.**

TRADE CHAT.

THE CANADA GAZETTE of November 6 gives notice of the incorporation of the William Buck Stove Co., Limited, with a capital stock of \$150,000, divided into 1,500 shares of \$100. They will acquire the business carried on by the late William Buck as stove manufacturer in Brantford, Ont., and will continue to manufacture stoves, ranges, furnaces, heaters, radiators and all parts thereof, hollow-ware, registers, all kinds of castings, stove furniture, etc. Their charter also includes power to sell their wares and to purchase patents for articles sold or manufactured in connection with the business.

The exports of Stratford district show an increase this year over last of \$48,596.

The Hamilton and Dundas Railway will not be operated by electricity for some days.

The old Exeter foundry has been purchased by R. Dawson, who intends making it into a bolt factory.

The test of J. E. Jones' new safety buffer has proved a success. It will be adopted on the Kingston Electric Railway system.

A large deposit of the peculiar sort of earth used as a basis for mineral paint has been found at Olinda, in the southern part of Essex county, Ontario.

Stephen Pierce, of the Aylmer roller mills, has the stone and lumber ready for the construction of a large elevator, capacity 40,000 bushels, to be run in connection with the mills.

The new pump put in at the Leamington waterworks station by Kerr Bros., of Walkerville, has been put in operation. The pumping capacity of the waterworks is 2,000,000 gallons daily.

The Sarnia Observer says the Bushnell Oil Co. are pushing things in Lambton county, and are thoroughly testing the territory in the vicinity of Sarnia to see if oil can be found in paying quantities.

The Canadian Pacific Railway has been importing a large amount of steel rails from the United States. On Tuesday and Wednesday 150 carloads arrived in Toronto, and the value of the rails is in the neighborhood of \$100,000.

Weidman's mills have been removed to Southwold Station, and workmen have been engaged for some days past in boring for water. Yesterday they attained a depth of 200 feet, when they struck a vein of gas. Southwold Station is wild with excitement. —St. Thomas Times, November 4.

The Beaver Line Steamship Co. notified the Government on Saturday that it was prepared to sign the contract for the Atlantic mail service. The call at Halifax both inwards and outwards during the winter service is made absolute, the company receiving for this over and above the regular

subsidy a bonus of £500 per trip. The contract was passed at the Cabinet meeting Saturday.

The Canadian General Electric Co. have awarded the contracts for a power and pump house at their works here. The building will be of iron, and the contracts have been let as follows: Masonry and brick work, Mr. Bailey, Toronto; iron and steel work, the Hamilton Bridge Co.; window frames, St. Lawrence Foundry, Toronto; galvanized iron work, Douglas Bros., Toronto.

This is the way an exchange puts it: A man in a neighboring town recently made his wife a birthday present of a mammoth parlor lamp. She gave it his name, and when asked why she did so, replied: "Well, you know, dear, it has a good deal of brass about it. It is handsome to look at, requires a good deal of attention, is sometimes unsteady on its legs, is liable to explode when half full, flares up occasionally, is always out at bed time, and bound to smoke."

"I think the heaviest crops I saw in the province this fall," said a well-known loan company's manager, "were at Russell and north of Griswold. The wheat easily went 20 bushels to the acre. This is going to be a great country for banks, and, as you will notice, all the new branches that have been opened are managed by local men who are well acquainted with the residents of the district. A farmer of standing can easily get a loan from a bank, just as in Ontario assistance is given to a village or country merchant." —Free Press, Winnipeg.

It is reported that a vein of placer mining gold has been found in Raleigh township, about eleven miles from Chatham. The parties who made the discovery are very reticent about the find and will not even indicate the farm on which the gold was found. Some of the sand was taken to Chatham yesterday and tested by a druggist, who estimated the sand would pan out several hundred dollars to the ton. He refused to tell the exact location the find was made in, but said that the vein was about six feet deep and extended across the whole farm. —Observer, Sarnia.

FREAKS WILL BE ABUNDANT.

A cycle show this year would undoubtedly prove a highly varied exhibition, says an American paper. Taking fifty well-known makers, fourteen will produce bevel-gear wheels, four will have other styles of chainless cycles, nine will offer an enclosed chain model, without extra charge, fourteen will offer chain wheels with improved details and gear cases on option, while nine will offer no special features except in the workmanship. It is likely that "freaks" will be abundant next season.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. *Mention this paper.*

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales made and repaired.

Write for Catalogue.



WANZER.

Improved Wanzer Lamp

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER LAMP & MFG. CO. HAMILTON.

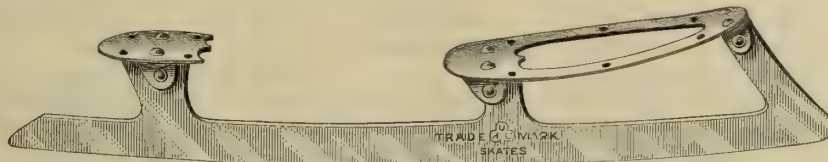
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are : **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



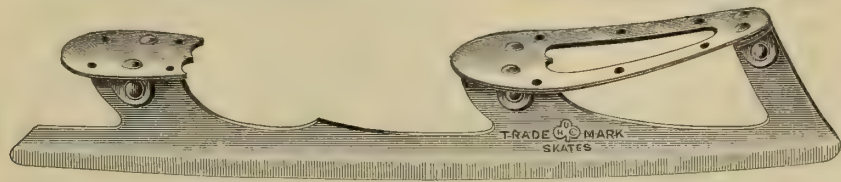
Plain Runner, Straight.



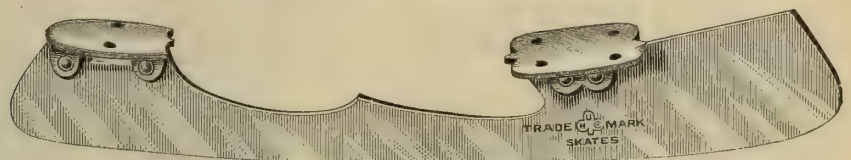
Plain Runner, Curved Blade.



Ribbed Runner.

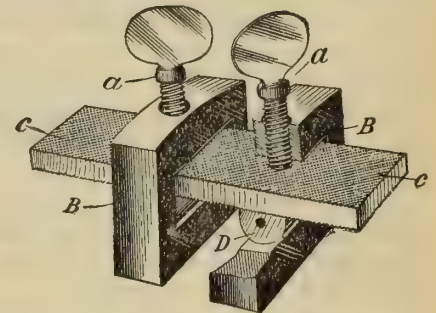


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

**THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY**

**THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.**

Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street

— **TORRINGTON, CONN., U.S.A.**

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Nov. 12, 1897.

HARDWARE.

THE week has furnished quite an active business in most lines of hardware. This is especially the case in wire nails, horse nails, horseshoes, bolts and rivets, draining tools, ware, cutlery and sporting goods. While these have contributed the bulk of the movement, others are not neglected, for cut nails, screws, files, cordage, building paper and cement have supplied quite a good trade. A lot of the activity, no doubt, is due to the pending change from summer to winter freight rates on the 15th of this month. Values generally are firmly held, with possibly the single exception of barbed wire, which is somewhat unsettled for reasons dealt with elsewhere. Plain wire is dull but steady.

BARBED WIRE—Very dull. There is some enquiry for future wants, but prices are unsettled in this connection. We quote as before, \$2.35 f.o.b. Montreal.

PLAIN WIRE—Demand at the moment for annealed and oiled and annealed is very light. Discounts are unchanged at 30 and 10 off.

WIRE NAILS—The demand continues very brisk at the advance and car lots are moving quite freely, as well as smaller quantities. The pending rise in freight rates has a good deal to do with this activity. We quote \$1.90 f.o.b. Montreal.

CUT NAILS—Demand for cut nails is of a quiet kind and business is far from equaling that in wire nails. The base price is unchanged at \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There has been a good steady enquiry for horse nails with discounts 50 per cent.

HORSESHOES—An active trade has been transacted in horseshoes. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There is an active demand at unchanged prices. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Trade continues quiet at 12½ per cent.

BOLTS—There is a good enquiry, especially for carriage supplies. Discounts are as follows: Carriage bolts, ¼ and 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—There has been a well sustained movement in these. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—There has been a good enquiry for draining tools; and values rule steady.

FILES—Fairly active. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There has been a moderate enquiry for cordage. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—Quiet and unchanged, Royal Canadian being quoted at \$29.

BUILDING PAPER—There is a good enquiry for building paper. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.40.

HOLLOW WARE—Trade has continued quite brisk in all kinds of enamelled goods. Values are steadily held.

HINGES—There is nothing new to report on these. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—There is an active demand for cutlery, especially in the more fancy lines of household and pocket cutlery.

SPORTING GOODS—Nothing new to report in this connection, business being quite satisfactory.

SHOT—There is a good demand for this article. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

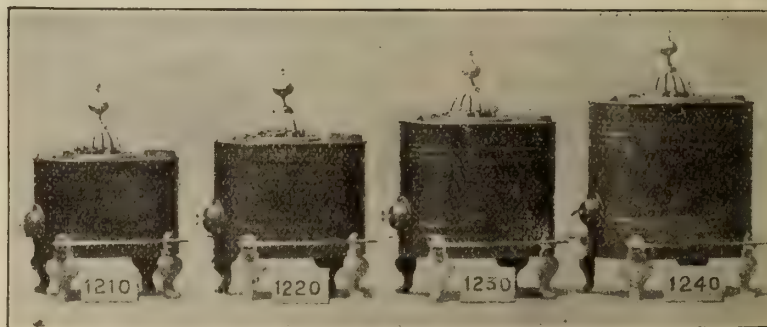
CEMENT—Supplies are still short and prices are firm at \$2.10 to \$2.20 for English and \$1.85 to \$1.90 for Belgian.

METALS.

Trade in metals continues active and jobbers are being pressed to get forward shipments before the change in railway rates. Activity is not centred in any one line, but applies to all.

PIG IRON—There have been several round lots of No. 1 Hamilton pig placed recently at a range of \$16 to \$16.50, and for small lots an advance on this basis would be necessary. We quote: No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

FAMOUS AIR TIGHTS



FOUR SIZES. Planished or Russian Iron Body.

Take 21, 22, 23 and 24 in. wood respectively. Cast Top, with large wood opening and nickel-plated fancy swing cover and urn. Front Screw Draft. Loose parts packed inside for shipping. Every stove papered and crated.

... Manufactured by ...

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG AND VANCOUVER

Fire Bricks**Drain Pipes****Contractors' Supplies****F. HYDE & CO.**

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

BAR IRON—There has been an active demand for bar iron, and the mills say they have all the orders they can attend to for a long while. We quote: \$1.45 to \$1.55, with an allowance on this for carload lots.

BAND IRON—Demand for this is quite as good as for bar iron and values rule steady, the basis being 30c. advance on that ruling in the case of bar iron.

HOOP IRON—Demand has been quite active and several carload lots have been sent forward this week. Prices are firmly held on the basis of \$2.25 to \$2.35.

SHEET STEEL—There is a good business passing in this line. Prices are unchanged at \$2.35 base.

GALVANIZED IRON—Demand active and jobbers are in a better position to attend to orders promptly than heretofore. They are still quoting on the basis of \$4 to \$4.15 for 28 gauge lots, but this is an inside figure, for fresh supplies would cost them as much laid down here.

TINNED IRON—Quiet and unchanged at 5½c. for 6 x 30 No. 24; other sizes and gauges, the usual extras.

SHEET IRON—In fair enquiry and prices firmly held on the basis of \$2.25.

LEAD PIPE—There is a fair enquiry for lead pipe and we quote 7c. for lead and 7½c. for composition waste, with a discount of 27½ per cent.

PIG LEAD—There has been no further change in this metal. Prices are steady at \$3.85 despite recent easiness outside.

INGOT TIN—In good demand in a jobbing way at 16c.

INGOT COPPER—There is a fair enquiry and prices are steady at 12 to 12½c.

SHEET COPPER—There is a better demand this week, while prices rule firm. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There is a good demand for these, especially from the west, several orders for round lots being received from Ontario this week. Values are firm and unchanged at \$2.10 to \$2.25 as to quantity.

TIN PLATE—There is a good demand for these, both from stock and to arrive, indicating that supplies are required in the country. Stocks in jobbers' hands here are now much better assorted than they have been. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., 3.80; do. I. X., \$4.80.

TERNE PLATES—There is a quiet trade in these. Prices are very firmly held at \$6.

COIL CHAIN—There is a fair enquiry for this article, and the price rules steady at \$2.85 for ½ up.

Cattle Chains

The superiority of Greening's consists in their being of uniform strength in all their parts. Simplicity of the attachments and best quality of material and workmanship.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

ROLLING MILLS

.. MONTREAL

MERCHANT BAR IRON—

	BRAND
Best Refined Bar Iron	AVB
" " Rivet Iron	AVB
" " Horseshoe Iron	
Ex. Best " Bar Iron	AXB
" " Rivet Iron	AXB
" " Stay Bolt Iron	AXB
" " Hammered Iron	AHB
" " Charcoal Iron	ACB

Tyre, Sleigh Shoe,
Axe and Rivet STEEL.

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

SHEET ZINC—In fair demand and steady at 5 to 5½c.

SOLDER—Quiet and steady at 11½c.

SPELTER—Moving quietly at 4¾c.

ANTIMONY—Without change, at 9½ to 10c.

IRON PIPE—There has been a good active enquiry for iron pipe during the week. We quote as follows: Black pipe ¼-inch, \$2.05; ¾-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1¼-inch, \$5.35; 1½-inch, \$6.90; 2-inch, \$9.35; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—The rolling mills have made purchases of scrap during the week at \$13.50 to \$14 for wrought iron, which is somewhat lower than what was realized recently.

GLASS.

The glass market is very active, both for carload lots and smaller quantities. Values are very firm, though the anticipated advance has not materialized yet. We quote: First break, \$1.30 in 50 foot boxes, and \$2.55 in 100 foot boxes.

PAINTS AND OILS.

The activity in this department, in anticipation of the winter freight rates, which come into force next week, is fairly well maintained, and a large lot of goods will be shipped this week. We have no changes in prices to report.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¼c.; kegs, 4½c.

PUTTY—We quote firm with prospect of advance; bulk, \$1.50; bladder in bbls. \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Steadier; Raw, 43c. boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

Canadian refined has declined ½c. to 14c. in car lots, and 15c. in small quantities. American in car lots is offered at 16½c. and small lots 17½c.

COAL.

There is no change in coal. We quote: Stove and chestnut, \$5.75; egg, \$5.50;

Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

ASHES.

There is nothing at all doing. We quote: First pots, \$3.55 to \$3.65; seconds, \$3.25; pearls are nominal.

HIDES.

There is no change in hides. Lambskins are dear at 75 to 80c. each.

MONTREAL NOTES.

Canadian petroleum has declined ½c. per gallon.

The total receipts of Scotch firebricks to date at this port are 1,550,762.

There is an easier feeling in barbed wire, and the fact influences other lines.

Sales of round lots of Belgian cement have been made at \$1.90 f.o.b. Montreal.

There is a firmer feeling in galvanized iron, and an advance of ¼ to ½c. is asked for fresh importations.

ONTARIO MARKETS.

TORONTO, Nov. 12, 1897.

HARDWARE.

URADE is being particularly well maintained for this time of the year.

Dealers who make a specialty of lumbermen's supplies are doing a good business, axes, saws, files, etc., being in brisk demand. In such fall specialties as coal hods, stove boards, stove pipes, dampers, cow ties, rope halters, bucksaws, meat and lard cutters, a good trade is to be noted. Sleigh bells are being called for oftener than they were a week ago, and dealers who had booked orders for skates some time ago are asking to have shipments made. Wire nails are in good demand, and higher prices are expected to rule after this week on account of the higher freight rates, which go into operation on Monday. A little better discount than formerly is being given on churns. In other respects prices are quotably unchanged.

BARB WIRE, ETC.—A number of enquiries are being received, but very few shipments are being made. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE, ETC.—A slightly better demand is to be noted this week for ordinary fence wire. Hay-baling wire is still going out regularly. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—Trade is fairly good in the ordinary tinnerns', and for coppered spring there is quite a demand. Owing to

delay in shipments stocks are somewhat low in English makes. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—The demand appears to be brisker than even a week ago, and higher prices are looked for after the winter freight rates go into force on Monday next. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points other than those named the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—Orders are small, and there are not many of them. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade is quiet and discount unchanged at 50 per cent.

HORSESHOES—Trade this week shows a slight increase, and prices are firm. We still quote: \$3.25 f.o.b., Montreal.

SCREWS—Business in this line continues brisk. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.

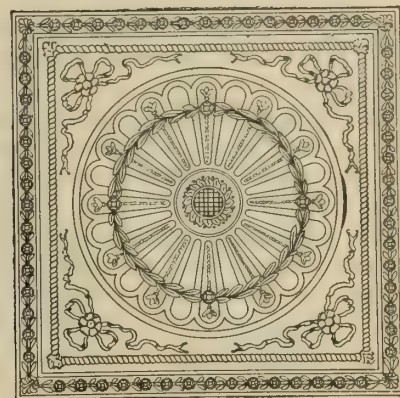
BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS—The bolt trade continues fairly active. Discounts are: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—The demand continues fair. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, up to 2½ lbs. inclusive (steel) 65 and 5 per cent.; ditto, 3 lbs. and heavier, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—The demand is better, but it is nearly altogether for sisal in the smaller sizes. We quote: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16

EMBOSSSED STEEL CEILING



OUR CEILINGS are all well and evenly coated on both sides with the **Best of Pure White Zinc**, mixed with **Pure Linseed Oil and Turpentine**, which thoroughly protects the metal, and when up they may be painted in any manner desired, from an ordinary "flat" finish in one or two tints, to the more elaborate decorative finish of "wiping" each plate in a number of tints, and touching up the raised parts with Bronze or Gold Leaf. There is practically no limit to the decoration that can be put on our Goods, the Embossing and Design giving the decorator unlimited scope for his abilities.

Beware of inferior imitations. We shall be pleased to send you our catalogue and to submit designs and estimates.

YOU SHOULD HANDLE THESE GOODS.

METALLIC ROOFING CO. Limited

TORONTO

THE PIONEERS AND MOST EXTENSIVE MAKERS OF SHEET METAL BUILDING MATERIAL.

in., $8\frac{1}{8}$ c.; 3-16 in., $8\frac{3}{8}$ c.; deep sea line, $13\frac{1}{2}$ c. for water laid, and $14\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—The demand is steadily increasing and slightly better discounts are being given. Discounts, 60, 10 and 10 to 70 per cent. from both stock and factory, with terms 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Still quiet. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS, ETC.—A much better demand is reported for spades and shovels, and a fair business is being done in draining tools. Discount on spades and shovels, 45 and $2\frac{1}{2}$ per cent.

AGRICULTURAL TOOLS—An occasional order is being received for forks and vegetable scoops, but at this time of the year not a great deal of business is naturally looked for.

SNOW SHOVELS—Are going out freely at \$2.95 for steel.

BUILDING PAPER—There is quite a scarcity in tarred lining, and, as orders have been coming in freely, jobbers have experienced some difficulty in supplying the demand. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40

for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Trade continues good. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

WARE—There is nothing particularly new to report, either in respect to granite or tin ware.

CUTLERY—The demand continues fairly good, with the demand principally for pocket knives and table cutlery.

HINGES—Trade is moderate. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14 inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—Business is brisk all round. Belgian cement has advanced again, 10c. per bbl. this time. We quote: in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.40; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

FALL SPECIALTIES—Goods are not moving as well as it was expected they would, the quantities wanted being smaller than anticipated.

SPORTING GOODS—Business in guns and rifles has fallen off materially, but in am-

munition a nice trade is still being done. Quite a number of orders have been received for revolvers.

METALS.

Trade continues fairly good, with prices firm, but materially unchanged.

PIG IRON—There is no change to note. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—There is some call on lumbermen's account, but on the whole there is not a great deal doing. Sleigh shoe steel is receiving some attention. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Trade is brisk and prices unchanged. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—Trade has varied somewhat in this line. The demand is principally for the heavy gauges, the supply of which is fairly good. We quote as follows: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—The demand is principally for the heavy gauges. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to

16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—While there has been no material falling off in the demand, stocks are still holding out, but it is expected that there will again shortly be some difficulty experienced in supplying the lighter gauges, especially in eight-foot iron. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{7}{8}$ c.; 18 to 24, \$3.87 $\frac{1}{2}$ c.; 26, $4\frac{1}{8}$ c.; W. G. 28 gauge, \$4.37 $\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Trade is moderate. We quote: $3\frac{3}{8}$ and larger, \$1.75 per 100 lbs.

TINNED IRON—No improvement to note. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{7}{8}$ to $7\frac{7}{8}$ c. per lb.

LEAD PIPE AND TRAPS—Trade is scarcely as good as a week ago, but it is still better than it was before the recent improvement set in. We quote as follows: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, 27 $\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Trade is steady and prices firm. We quote pig lead at 4 to $4\frac{1}{8}$ c., and bar, at $4\frac{1}{2}$ c.

SHOT—Trade is fair. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, 12 $\frac{1}{2}$ per cent.

INGOT TIN—Very few large sales have been reported, but, as far as shipments go, they have been quite numerous in small quantities. We quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb. Outside markets are steady.

INGOT COPPER—Quiet at 12 to $12\frac{1}{2}$ per lb. Prices in the outside markets are somewhat unsettled and irregular.

SHEATHING COPPER, ETC.—A number of orders have been received for ordinary sheathing, but roofing copper has been rather quiet. A steady demand is reported for braziers' copper. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Trade has increased materially during the past week, some good orders having been received. Quite a number of shipments have been made. In sizes of wrought iron pipe from $\frac{1}{4}$ to $\frac{3}{8}$ inch, prices are 13c. per 100 feet dearer. We quote: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$2; $\frac{1}{2}$ inch, \$2.35; $\frac{3}{4}$ inch, \$2.87; 1 inch, \$3.87,

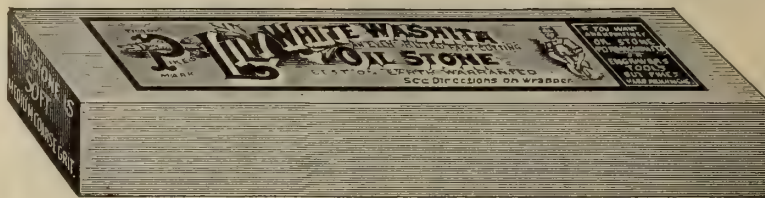
STANDARD of
for
30 Years
AMERICA



NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guarant-
eed to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the 38-40 and 44-40 cartridges, but also the 25-20 and 32-20.

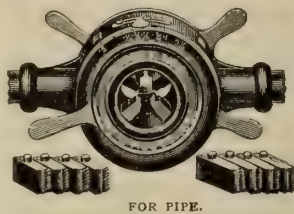


IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.



FOR PIPE.

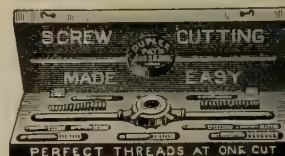
In Stocks and Dies
there is no better than

**HART'S DUPLEX
ADJUSTABLE.**

Write for Lists and Discounts

The Hart Mfg. Co.

20 Wood St., Cleveland, O., U. S. A.



FOR BOLTS.

$1\frac{1}{4}$ inch, \$5.10; $1\frac{1}{2}$ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, $\frac{1}{2}$ inch, \$4 to \$4.25; $\frac{3}{4}$ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; $1\frac{1}{4}$ inch, \$9.25 to \$9.62 $\frac{1}{4}$; $1\frac{1}{2}$ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—Practically nothing but small quantities are wanted. Discount, 60 and 10 per cent.

RANGE BOILERS—Trade is moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Full polished has been advanced 10c., now being quoted at \$3 per box. Some fair shipments have just arrived. We quote: Half-polished, 52-sheet boxes, \$2.25 to \$2.30; ditto, 60-sheet boxes, \$2.35; ditto, 75-sheet boxes, \$2.45; all-bright, \$2.90 per box.

TIN PLATES—Trade is generally satis-

factory, more large sales having been made during the week. We quote as follows: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade shows a slight improvement, and prices are firm. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SHEET LEAD—Trade is fair. We quote: $5\frac{1}{2}$ c. per lb.

COIL CHAIN—An improvement is also to be noted in this line, orders coming in more freely than for some time. We quote: $\frac{1}{4}$ in., $4\frac{3}{8}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade is good, with staple weights scarce. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

SOLDER—Trade is much as before. We

HOUSEHOLD CANS

ESTABLISHED
1860INCORPORATED
1895

Every well-regulated house requires one of these sets. Send for sample, and you will not be long in sending for more. . . .



IN SETS OF FIVE

Lithographed
in
Fancy Colors.

Very Pretty
Designs.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Business is not as good as it was a week ago. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

Trade has kept well up in sheet, plate and ornamental glass. Storm-window sizes have not been ordered as much as usual. Prices are unchanged. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

Trade keeps unusually brisk without any special fluctuations in values. On the heavy staples there has been great activity in shipping by the last lake boats for the season. In some parts of the Dominion the outlook is most promising, and the jobbers in these sections have placed some good sized specifications. The railroad shops, carriage makers and implement makers are all busy and are consequently not slow in ordering. Putty is firm owing to the lively demand. Red lead is scarce, though stocks of Venetian, Indian and other reds are well sorted. There is scarcely anything doing in white lead. Linseed oil and lubricating oils are in fair de-

mand. The higher grades of ochres are much enquired for. Domestic and imported japan colors are in fair demand. Harness oil is an important article, and is in demand by hardware trade throughout the country. Glue is firm, especially the European makes, but prices are quotably unchanged. A good trade is being done in floor polishes. It appears that the recent weakness in turpentine in the Southern States has been overcome, through the Belgian syndicate buying there in quantities. Gum shellac has fallen 4c.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

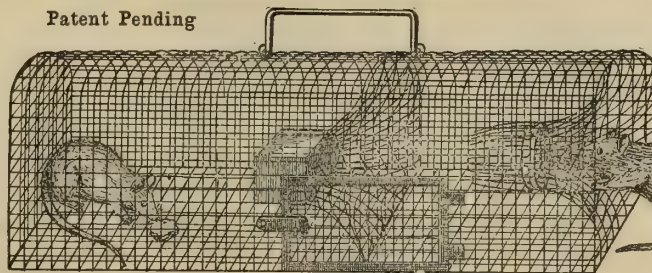
OLD MATERIAL.

There is very little scrap offering. Manufacturers are not as willing to pay the prices asked as they were some time ago, though the demand is as large. Tin, copper and

THE "YANKEE" TRAP

IS A RAT CATCHER

Patent Pending



AND NEEDS NO SETTING

One rat goes in;
the family follows.

If you want a novelty to boom business—handle the "Yankee" Rat and "Wizard" Mouse Traps—

As many as 19 rats have been caught in one trap in a single catch.
20 gross traps sold in Canada in six months.

Sole Agents for Canada,

THE D. MOORE CO., LIMITED, HAMILTON

Cut nails, 50 and 60 dy	2 50
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	
Horse shoes, iron, light, medium and heavy, keg.	\$4 00
Snow shoes	4 25
Steel, light	4 25
" extra light	5 75
Bar and band iron, \$2.10 basis.	
Swedish iron, \$5 basis.	
Tool steel, Black Diamond, 100 lbs.	8 00
Jessop	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs. .	3 50
26 gauge	3 75
28 gauge	4 00
Galvanized American, 16 to 24 gauge	4 00
26 gauge	4 25
28 gauge	4 50
Genuine Russian, lb.	12
Imitation	8
Tinned, 24 gauge, 100 lbs.	7 25
26 gauge	7 50
28 gauge	8 00
Tin plate, IC charcoal, 20 x 28, box	9 00
" IX	11 00
" IXX	13 00
Canada plate, 18 x 21 and 18 x 24	3 25
Sheet zinc, cask lots, 100 lbs.	6 00
Broken lots	6 50
Pig lead, 100 lbs.	4 25
Wrought pipe, black, 1/4 inch.	2 50
" 3/8 inch.	2 75
" 1/2 inch.	3 00
" 3/4 inch.	4 00
" 1 inch.	5 00
" 1 1/4 inch.	7 00
" 1 1/2 inch.	8 50
" 2 inch.	11 50
" Over 2 inch.	65 p.c.
Rope, sisal, 7-16 and larger	6 75
" 3/4	7 25
" 1/2 and 5-16	7 75
Manilla, 7-16 and larger	8 25
" 3/4	8 75
" 1/2 and 5-16	9 25
Cotton, all sizes, lb.	15
Axes, per box	\$5.50 to 8 00
Screws, flat head, iron	85 p.c.
Round "	77 1/2 p.c.
Flat " brass	80 p.c.
Round "	72 1/2 p.c.
Bolts, carriage	60 p.c.
Machine	60 p.c.
Tire	55 p.c.
Sleigh shoe	65 p.c.
Rivets, iron	50 p.c.
Copper, No. 8, lb.	25c.
Spades and shovels	40 p.c.
Harvest tools	60 to 60-10 p.c.
Axe handles, turned, second growth, hickory, doz.	2 50
No. 1	1 50
No. 2	1 25
Octagon extra	1 65
No. 1	1 25
Ammunition, cartridges, Dominion R.F. 50 p.c.	
Dominion, C.F., pistol	25 p.c.
" military	15 p.c.
American R.F.	35 p.c.
C.F. pistol	5 p.c.
C.F. military	Net.
Loaded shells, Eley's 12 gauge, M.	16 00
American, M.	16 20
Robin Hood, M.	18 00
Shot, ordinary, per 100 lbs.	6 00
Chilled	6 50
Powder, F.F., keg.	4 75
F.F.G.	5 00
Robin Hood	10 00
Tinware, pressed	70 and 30 p.c.
Granite ware, according to quality. 50 and 10 p.c.	

CHEAP AND NASTY.

Sheffield manufacturers of steel for cycle purposes and cycle parts are already feeling the effects of the enormous influx of cycle parts from America for the ensuing season. One of the largest importers of Swedish steel states that firms in the cycle trade, with whom he does business, are keeping

back the delivery of their supplies as long as possible, informing him that not only are they interfered with to a certain degree by the engineering dispute, but that the country is being flooded with cheap American stuff to the detriment of the home-made article. They do not expect that the demand for these cheap parts will be a lasting one, but until experience teacheth bitterly the unreliability of this cheap American rubbish its sale must affect the home trade.—Hardwareman.

TRAVELERS' TALES.

USUALLY business negotiations between merchant and drummer admit of little that is not in accordance with dignity and rigid adherence to the old adage concerning honesty.

There are occasions, however, when the prospect of a little fun, combined with a chance for business, proves too much for the genial knight of the road.

A traveler for a stove house thus relates how he fell before such an opportunity: "I was showing," said he, "a very neat line of gas stoves, and had surmounted every objection advanced by the dealer, when the question of gas consumption was brought up. To settle the point it was decided to test my stove beside one he had. I was to turn the gas into the stoves while he went to the cellar to watch the meter.

"We tried his stove first. The moment his head disappeared down the cellar way I turned on the gas and started both stoves; then he signaled, I cut off his stove and let mine burn! The difference in the reading of the metre was so much in favor of my stove that I had no further trouble in securing his order."

A NAIL SALE.

A number of the "boys" were gathered around the stove in the only hotel in C— discussing the proprietor of one of the stores, who, owing to the claim he made that he never bought of drummers, was exceedingly hard to sell to.

The discussion brought out the fact, that as none then present had ever taken any orders from him—and there being little chance of ever being able to—all were eager to get even with him—in some way.

When the party broke up for the night it was arranged that Mr. B—, representing Transom, Lift & Co., wholesalers in iron and nails, was to try his fortune. Accordingly, the next morning, arrayed in his most engaging smile, he entered the store of the unapproachable. Upon his entrance the proprietor, seated at a desk in the rear of the store, apparently scented a drummer, as, after the first glance he buried his head in his papers, very much engaged.

"Good morning Mr. S—," said Mr. B—. No response from the desk.

"I represent—"

"Don't want anything, never buy from drummers," interrupted the desk.

"I've a great thing to offer you in nails," unconcernedly continued Mr. B—.

"Don't want ———," said the desk.

"I can put you nails at 90 cents." (\$1.80 was the base rate at that time).

"What's that, young man, 90 cents?" This from the desk, looking up for the first time.

"Sure," glibly responded Mr. B—. "Pittsburg freight, 90 days, two per cent. off ten."

This brought the proprietor to his feet, and the order was booked. After cordially shaking hands, Mr. B— walked to the door, where, with it half open and his fingers on the latch, he observed: "By the way, Mr. S—, I omitted to mention that our nails are put up 50 pounds to the keg."—By A. M. Embler in Hardware Dealers' Magazine.

PERSONAL MENTION.

Mr. T. B. Lee, of Rice Lewis & Son, Limited, is visiting some of the commercial centres in the United States.

Mr. T. Mortimer, manager of the cutlery department of M. & L. Samuel, Benjamin & Co., is in New York this week.

Mr. T. B. Williamson, who for many years was with M. & L. Samuel, Benjamin & Co., is now on the traveling staff of H. S. Howland, Sons & Co., Toronto, and is doing a part of the city and vicinity for that firm.

Mr. Walter H. Cottingham, of Montreal, manager of the Sherwin-Williams Co., left for New York on the 5th inst., en route to Cleveland, where he was joined the following Tuesday morning by his ten Canadian salesmen, who left Montreal on Monday evening to attend the annual convention of the Sherwin-Williams' salesmen in Cleveland to be held this week.

WIRE NAIL OUTLOOK.

After Monday next hardwaremen are practically certain to pay higher prices for wire nails, as the winter freight rates go into force on that day.

The advance will probably be from 5 to 10c. per keg.

In the United States the wire nail market is extremely quiet, but no material changes in prices are expected, for the reason that the product which would otherwise have gone into wire nails, had the demand held up, will be diverted into other channels at good prices.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A MEETING of the creditors of Beauchamp & Deslauriers, sash and door manufacturers, St. Henri de Montreal, Que., will be held on the 15th inst.

James Powell, general merchant, Halifax South, Que., has assigned.

Eliza A. Sherwood, general merchant, Bristol, N.B., has assigned.

Godfroi Caron, general merchant, Cap St. Ignace, Que., has assigned.

Aristide Belair, contractor, Maisonneuve, Que., is offering 50c. on the dollar.

The meeting of the creditors of the Cascapedia Pulp and Lumber Co., Limited, Maria, Que., has been postponed to the 15th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

The Montreal Hide and Calf Skin Co. have dissolved.

The Montreal Wool and Sheep Skin Co. have dissolved.

Timmins & Urlin, general merchants, Ayr, Ont., have dissolved.

J. & T. Hewson, harness makers, Norval, Ont., have dissolved, Thomas Hewson to continue.

A co-partnership has been registered by Alfred Dickie and Thomas N. McGrath, under the style Dickie & McGrath, lumber dealers, Tusket, N.S.

Croft, Phillips & Wrinch, wholesale dealers in fishing tackle, needles, etc., Toronto, have dissolved, Mrs. Croft retiring, and the business to be carried on by the remaining partners, style unchanged.

SALES MADE AND PENDING.

John T. Weeks, general merchant, Alberton, P.E.I., is advertising to sell out.

Wm. Lucas, general merchant, Middlemiss, Ont., has sold out to Showers & Leary.

Pierre Legare, tinsmith, Quebec, is advertised to be sold out by bailiff sale on the 15th inst.

Thomas Barry, general merchant, Pembroke, Ont., has sold his stock at 41c. on the dollar.

CHANGES.

Thomas Johnson, blacksmith, Clifford, Ont., is giving up business.

Alexander Robertson, painter, Paris, Ont., has removed to London.

J. L. Johnston, hardware merchant, Edmonton, is commencing business.

The Northern Water-works and Power Co., Montreal, has made application for a charter of incorporation.

Wallace, Kempton & Canfield will open out in business as general merchants in

Middle Musquodoboit, N.S., on December 1st, 1897.

J. A. Robinson, blacksmith, Metapedia, Que., has commenced business.

R. G. Anderson, grist mill owner, Port George, N.S., has opened out in business.

Arthur B. Smith, general merchant, Cocaigne, N.B., has removed to Buctouche.

F. H. Leonard & Sons, coal dealers, Brantford, Ont., have gone out of business.

Samuel Coborn, dealer in agricultural implements, Stayner, Ont., has gone out of business.

H. N. Coursier, general merchant, Revelstoke and Trail, B.C., has discontinued his Trail branch.

McKinnon Bros., general merchants, Vankleek Hill, Ont., have opened a branch at Dalhousie Station.

Tingley Bros., agricultural implements and carriage dealers, Sackville, N.B., have opened out in business.

Application is to be made for the incorporation of the Shawenegan Water and Power Co., Shawenegan, Que.

Wm. G. Gould and John Wilson have been registered as proprietors of the firm Gould & Wilson, Waterloo Water-works, Waterloo, Ont.

FIRES.

The foundry of Reid and Brown, Toronto, has been burned.

DEATHS.

Robert Proctor, blacksmith, Sussex, N.B., is dead.

J. B. Stapleton, of James B. Stapleton & Co., general merchants, Port Hawkesbury, N.S., is dead.

LUMBER IN SOUTH AMERICA.

W. L. Lovitt's steel barquentine Hillside finished loading lumber on Saturday for Buenos Ayres. She takes what is probably the largest cargo of spruce lumber ever shipped from the Maritime Provinces to a South American port. In her hold she carries 388,653 feet of boards from 12 to 16 feet long, and from 3 to 12 inches wide. Her deckload consists of 191,604 feet of spruce boards and scantling, making in all 580,257 feet. This load is 141,000 feet over her registered tonnage and is 78,000 feet more than her load from St. John on her last voyage. Her deckload is 7 feet 6 inches high. The cargo was furnished by Parker, Eakins & Co., and was loaded by Capt. John B. Crosby, of Tusket. Capt. C. says he could have stowed five or ten thousand feet additional under deck if the under deck cargo had partly been made up of scantling.—News, Yarmouth, N.S.

SHOW CASE AND WINDOW.

THE most attractive store is one where all the goods are in show cases on the counter, or behind glass doors, says a writer in Hardware Dealers' Magazine. The druggist and confectioner fully appreciate this, and the arrangement of their wares therein is usually very attractive. If the hardware dealer considers a show case necessary at all, he usually covers the bottom of it with green baize and promiscuously scatters over it most of his stock of pocket knives, razors and carving sets. But even in the hardware store the show case may be made "a thing of beauty." Half way between the top and bottom of the show case suspend a glass shelf. Cover the bottom of the case and the top of the shelf with yellow crepe paper or cotton crepe. Procure some glass dishes, not less than five inches in length, and of any convenient shape, but have them all alike. Polish the glass until every particle of it shines. Place these on the bottom of the case in uniform order and fill each one neatly with some class of goods carried in stock.

Have neatly printed price tags on each article. On the shelf place the cutlery. Put it in so as to form a diamond or heart, or some other fancy figure, or put light handled knives in one group and dark handles in another; or, better still, put those of a price together. Whatever you put in the case put it in anything but a haphazard manner.

A good advertising show window may be made by building back a platform from the lower part of the window. This platform should be raised several inches at the rear, so as to give a good slant toward the street. Cover the boards neatly with red crepe tissue paper. On this groundwork of tissue paper use tacks, nails or any similar small articles carried in stock to form letters. Let the words thus worked out tell some story to the passer-by. It may be winter season and the tacks might be made to tell that the advertiser had skates from 50c. to \$2 per pair, or that sleds are from 50c. upward. The advertisement should be changed at least weekly, so that people would come to look in at the window to see what bargains are offered. The bright steel of the tacks against the background of red paper makes a charming contrast.

ITEMS ABOUT BUSINESS MEN.

John Hiles, general storekeeper, Dunganon, who adopted the cash system (strictly) four and a half years ago, says it is a success.

Sanderson Bros., of Wroxeter, who a few months since opened a fine new stock in general lines, report business entirely beyond expectations.

CATALOGUES, BOOKLETS, ETC.

A PRETTY CATALOGUE.

The designing and printing of manufacturers' catalogues has reached such a standard of excellence both from an artistic and from a business standpoint that a maker has to be right up-to-date to get out anything that will catch and hold dealers' and buyers' attention. The Toronto Radiator Manufacturing Co., Limited, have issued this fall a catalogue of their radiators, the "Safford," which is bound to interest. The cover specially is a "thing of beauty." It is of rough yellow paper, artistically printed and embossed in dark yellow and brown and bound with a nice, heavy green cord stitched at intervals of an inch at the back. The catalogue proper is finely printed on heavy, smooth, white paper, and is generously illustrated with the "Safford" radiator, in all its shapes and sizes. This catalogue may be had on application.

JACK AND HIS UNCLE.

A young Irishman in want of \$25 wrote to his uncle as follows:

"Dear Uncle—If you could see how I blush for shame while I am writing, you would pity me. Do you know why? Because I have to ask you for a few dollars, and do not know how to express myself. It is impossible for me to tell you. I prefer to die. I send you this by messenger, who will wait for an answer. Believe me, my dearest uncle, your most obedient and affectionate nephew.

"P.S.—Overcome with shame for what I have written, I have been running after the messenger in order to take the letter from him, but I cannot catch him. Heaven grant that something may happen to stop him, or that this letter may get lost."

The uncle was naturally touched, but was equal to the emergency. He replied as follows:

"My dear Jack—Console yourself and blush no longer. Providence has heard your prayers. The messenger lost your letter. Your affectionate uncle."

A \$15,000 LAWSUIT.

The failure of the Dominion Cold Storage Co. has entailed another heavy lawsuit. In order to get the charter, the company asked Mr. D. A. McCaskill, of the varnish firm of McCaskill, Dougall & Co., Montreal, as a shareholder, to oblige the company by completing the necessary deposit of \$15,000, to be considered a loan for a few days until the calls were in. Mr. McCaskill readily arranged with the Molsons Bank for the deposit, subject to his order. Months afterwards the Storage Company failed. In the meantime Mr. McCaskill had withdrawn his deposit, as arranged. The curators now proceed to sue Mr. McCaskill for the \$15,000.

**"We'll just
leave
our card"**

As we sell no goods at retail, we employ no peddlers. As our traveller didn't find you in when he called, we suggest that our mutual interests would gain every way if you would write us about acting as our agent for the distribution of our Brooms and Brushes direct to the consumer.

**Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.**



See our line of

**Christmas
Novelties**

IN

**Sterling Silver and
Electro Silver Plate**

before placing your order elsewhere.

The Toronto Silver Plate Co. Limited.

Silversmiths and Manufacturers of Electro Silver Plate.

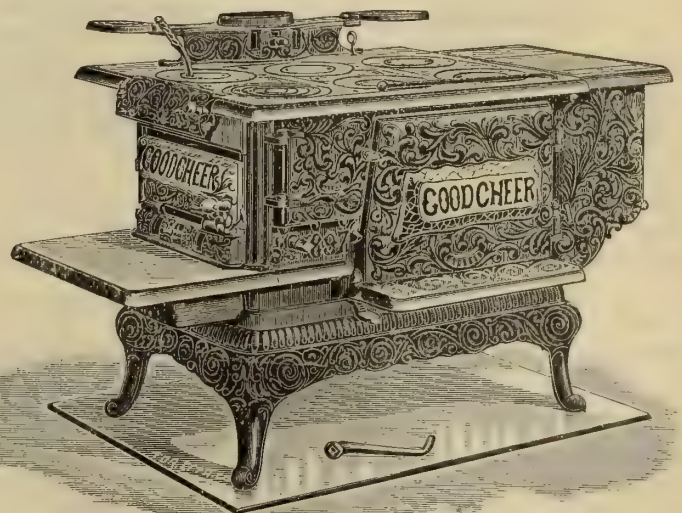
Factories and Salesrooms: **TORONTO, CANADA.**

E. G. GOODERHAM, Manager and Sec.-Treasurer.

**Good
Cheer
Ranges**

**LARGE
STEEL
OVENS**

Threestyles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

AMONG THE RETAILERS.

Enamel Ware vs. Tinware. Though the number is but few, there are yet some dealers who push the trade in tinware in preference to that in enamel ware. Some report that the quality of the latter is not up to what it used to be, and that persons trying it find it not up to their expectations. It is a question whether or not this is the fault of the dealer, who is apt to try to sell a poor article in order to catch trade which he is afraid of losing because of flaring down town advertisements. The majority of dealers are of the opinion that though enamel ware is offered of a cheaper quality than formerly, yet as good an article as any ever offered can now be had. The dealer who knows and sells the very best need not be afraid of losing his trade, if he has the power or ability to get his customers to give it a trial. And a good salesman should have that power.

Misrepresentation. It does not pay to misrepresent. I was standing in a hardware store waiting to see the proprietor, who was trying to sell a stove to a couple of farmers, shrewd looking fellows, and I was admiring his skill as a salesman, when one of the men said, "How does this stove compare with the Blank stove?" The dealer, quick as thought, replied; "The Blank stove is no good. This stove, etc., etc." I saw the men look at one another, and in about two minutes left with the promise "We'll see about it." The men happened to have had one of the stoves the dealer was so ready to condemn, and were unprepared to accept so sweeping a condemnation of this stove. This is but one of many illustrations that have taught me that misrepresentation does not pay.

Trade Good. The general retail hardware business this week has been good, the stove trade taking the lead easily, furnaces, ranges and gas, wood and coal stoves moving satisfactorily. The lamp business is in a fair condition, the cheap grades of coal-oil lamps selling well, though the demand for the better class of goods is not what it used to be.

A Good Window. Russill's "in the market" usually has a well-dressed window. They have this week in one of their windows a stand covered with red cotton and raised in three steps to about 30 inches higher at the back than at the front. In the centre is a small stove, and all around it are articles for farmers' use in house, shed and barn. There is not too much to be confusing, and each article is ticketed with its price. The firm is offering a new article, a horse-blanket fastener, which is intended to hold the

blanket to the traces, and in order to draw attention to it, a number of the fasteners have been placed in the central part of the window with cuts illustrating the workings of the fastener, and the price tag placed near by shows the small expense entailed in indulging a possible desire to possess one.

THE RAMBLER.

THE LOOSE SCREW.

Editor *HARDWARE AND METAL*: I noticed an article in your paper of last week about a man losing a few nights' sleep over trying to locate a certain screw on an engine or boiler, which was to have caused the explosion of the boiler if it had been running ten minutes longer with it being loose. The writer of the article would like someone to tell him where that screw is located. Well, I will try and help him out so he will be able to sleep again. And if this won't be enough to satisfy him I would advise him to give it up and rest contented.

In the first place, I will give you my opinion as to where the screw is, and then I will explain why I think so.

It is the screw that screws open and closes the throttle and shuts off the steam.

The boiler must have been so dirty and in such bad shape that in ten minutes it would have had to either burst or give way somewhere. The only way to remedy it would be to shut off the steam and stop the engine from running. The screw would naturally be loose when the throttle was opened, and therefore to shut off the steam it would have to be tightened. The throttle would have been open so much longer and the boiler would have been getting worse all the time. Therefore, by tightening that screw in the throttle valve the throttle would have been closed and the steam shut off, thus calming the water and steam, and bringing it to its natural level. By doing this all danger would be averted. My idea is that the loose screw is the screw in the throttle valve, which opens and shuts the valve. And if it is something else I would be just as much tempted to offer a reward as the writer was to have it explained.

Yours, etc.,

L. B. BOCK.

New Dundee, Ont., Nov. 8.

ATTRACTIVE PLUMBER'S WINDOW.

Fred. Armstrong, Queen street west, has this week a couple of attractive window displays. One contains some pretty gas stoves arranged in a circular form, and the other is a display of gas chandelier shades, all a dainty wine color, and arranged in rows, one above the other with strips of glass separating them. Both windows have floors and sides of plate-glass mirrors, heightening the effect produced considerably.

FOR SALE.

FOR SALE.—OLD ESTABLISHED HARDWARE Business in substantial town in Western Ontario. Stock and shop in first-class shape. None but those who mean business need apply. Terms easy to a good man. Address Box 11, *HARDWARE AND METAL*, Toronto.

A CHANCE SELDOM OFFERED TO SECURE an established business in one of the best towns in Canada; reason for selling, retiring from business; cash or half cash offers with approved security will be received up to Nov. 25th, 1897. B. D. Steacy, Hardware Merchant, Box 720, Brockville, Ont. (47)

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ADVERTISE anything, ANYWHERE

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MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL - - - TORONTO

Ideal Jewel

Self-feeding **BASE-BURNER**

WITH AND WITHOUT OVEN.

Every stove a . . .

DOUBLE HEATER

taking cold air from floor.



Duplex Grate and Shaking Ring.

OVEN is made of sheet **STEEL** and measures

11 inches high
11 inches wide
17 inches deep

2 SIZES WITH OVEN

2 SIZES WITHOUT OVEN

Manufactured by

Burrow, Stewart & Milne
HAMILTON

Agents for Manitoba and Western Territories, Merrick, Anderson & Co., Winnipeg.

Agents for Quebec, Nova Scotia, New Brunswick and P. E. Island, W. L. Haldimand & Son, Montreal.

A FRIEND OF LOOSE PULLEYS.

LOOSE pulleys, like liquor, are good if you use them right, but poor things if you abuse them. A good many are down on loose pulleys and prefer binders. I do not for these reasons: in a loose pulley you have only one bearing to oil and take care of; in a binder you have two bearings. Another thing I have against a binder, it is harder on the belt, for, being on the opposite side of the belt, the belt must necessarily run against the laps. It is no trick to take care of a loose pulley. I have under my care nine loose pulleys and have not babbitted one in over a year and a half. I use none but the best, home-made babbitt. You cannot buy what I call first-class babbitt. I use the best of oil, oil my pulleys once a day, and never have any trouble.

This is my method: Say a pulley wants babbitting. Have an iron mandrel for each size pulley. I have four sizes. The mandrel is made 1-64 smaller than the shaft the pulley runs on, and is slightly tapering so as to drive out easily. It has a shoulder about 1-16 deep, the size of the bore of the pulley, so as to be self-centring. Have a $\frac{3}{8}$ hole in each end of the hub of the pulley, with a thread tapped in for a common brass oil cup.

To babbitt a pulley after it is cleaned, take the iron spindle and hold it over a wood fire. Get a handful of pitch so as to have lots of smoke. Hold the mandrel till it is well smoked and as warm as you can comfortably handle. Set it on end and slip the loose pulley over it. Have your pulley warming while you smoke your mandrel, also have your babbitt melting over a slow fire, for this is one of the things that proves the old saying, the more haste the less speed. Put a wooden plug into each of the oil holes of the pulley so that the ends of the plugs touch the mandrel. Before you put the pulley on the mandrel take a piece of coarse twine and wind it spirally around the mandrel, cutting it off so it will not touch the mandrel except between the two oil holes. Get your babbitt just hot enough to pour; don't have it any hotter than will pour nicely. When you pour, pour as quickly as possible, having a steady, continuous stream till it is up to the top of the pulley; then drive your mandrel out with a wooden mallet, screw in your oil cups, slip your pulley on the shaft, first putting a little good oil on the shaft, fill your oil cups up with good oil, put on your belt and go ahead, remembering to fill up your oil cups with good oil once each day. And don't forget to screw the covers of your oil cups down good and hard so they won't come off.

Do this and you will not be abusing loose

pulleys nor will you have to babbitt them more than once in two or three years. I have one on a planer that has not been touched for five years, and the machine has run every day of that time.—Woodworker.

WHAT INVENTION HAS DONE.

What is it that enables an operative to-day to produce so much more in a less number of hours than he could thirty or forty years ago? It is simply invention, as embodied in the improved machines, tools, processes and appliances, that inventors are constantly furnishing to manufacturers. There was recently erected one of the largest plants in the world for the manufacture of Bessemer steel in all its forms, and, as stated by its superintendent, by means of the inventions and improved appliances

they have adopted, they are enabled to produce a ton of steel with but one-third of the manual labor required at their other establishment built twenty to twenty-five years before.

In 1866, steel rails cost \$165 per ton; in 1884 they had dropped to \$34; in 1893 they were \$21 to \$24 per ton, and in 1897 even less. See how that has expedited the building of railroads, which now cover the country like a network and without which modern enterprise could not be carried on. And the same is true of steel in all its forms. So that to-day we build steel bridges, steel vessels, steel cannon, steel frames for our buildings and for farm improvements, and use steel nails. Inventions and improvements have so reduced the cost of steel rails that already during the year 1897 this country has sold over 100,000 tons to Europe.

HARDWARE DEALERS' MAGAZINE

Largest Circulation in its field in the World

One Dollar
a Year.

D. T. MALLETT, Publisher
271 Broadway, New York

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Baylis Manufacturing Co.

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VARNISHES
WOOD FILLERS
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WRITE FOR PRICES.

Just received, new stock of Cutlery manufactured by

H. BOKER & CO.

UNRIVALLED LINES OF

SCISSORS RAZORS
POCKET CUTLERY

Try this famous maker's Single and
Double Blade Jack Knives.

Caverhill, Learmont & Co., Montreal

Plumber and Steam-Fitter

SEWER VENTILATION.*

By J. W. HUGHES, OF MONTREAL.

It has for some time been accepted as an imperative requirement of a properly planned plumbing system that provision be made for a free circulation of fresh air at all times through not only the main internal sewers of a building, but also through the smaller branches known as the waste pipe; in other words, that there be no dead ends, but that each and every part of a properly planned system of sewers for a building be constantly swept by a current of air; and, carrying out this principle, provisions are made in the planning of up-to-date public sewer systems for the ventilation of the same. The private sewers and waste pipes of a building, forming as they do but a part of the general system, should in my opinion be treated as a part of the whole; and the attempt to cut them off, as is done by fitting what is known as the intercepting trap, is a mistake: First, because it interferes with the basic principle of the water carriage system for the disposal of sewage, which is that the sewage should in the most rapid manner possible and without obstruction be carried from its source to its destination, yet the advocates of the intercepting trap place an obstruction (in other words a miniature cesspool) just at the point where it will do the greatest possible injury, and obstruct the rapid carrying away of the sewage, and defeat at the start the main principle on which the system is based—namely, the rapid removal of sewage and its carriage by an ample supply of water to its destination.

THE INTERCEPTING TRAP.

The advocates of the intercepting trap claim that the improved forms of this cesspool offer very little obstruction to the flow. Such a contention is absurd, as if they did not obstruct the flow, catch and hold the sewage, they would not be traps. Again, it is claimed that the improved traps are continually washed out or scoured to a certain extent. This is true as compared with the older forms; but let any one who has had occasion to open the cleaning eye of one of these traps that has been for some time in use speak of the conditions found, and he must tell of stored-

up putridity, sickening odors, and a condition of things unsanitary, not to be found even in the main sewers of the streets, and certainly not to be found in any other portion of the pipes in a building where the sewage has had an unobstructed flow.

PREVENTS AIR CIRCULATION.

My second charge is that it completely defeats any effectual general system of sewer ventilation by preventing free circulation of air through the whole system of main sewers and that part of them consisting of the building sewers. To offset this in part what is known as the fresh air inlet is placed between the intercepting trap and the building. This is a pipe brought to the surface and fitted with a suitable terminal; the proper name of this pipe is a "stink outlet," as when a fixture is used the rush of water from it must force a portion of the air out of the inlet, and then it of necessity becomes a stink outlet, and as a rule in cities this pipe must be so placed as to make it a dangerous nuisance even to the wayfarer, or if at a distance from the foot walk to the inmates of the building with which it is connected, as the foul air escaping from it gains access to the building it is proposed to protect through doors and windows. "But," says the advocate of the intercepting trap, "would you advise arranging pipes so that the air of the street sewers would have free passage through the pipes in a building?" To this my reply is "Yes." And there is no other safe plan. People who live in populous districts must bear each and every one his part of the risks as well as sharing the benefits of the whole. No one living under conditions imposed by the concentration of large masses of people on a limited area can escape, and the principle of the

greatest good to the greatest number must apply.

INEFFECTIVE SEWER VENTILATION.

The advocates of the intercepting trap do not deny the necessity of sewer ventilation, but they attempt to provide for it in detail instead of as a whole, and so defeat the object they wish to attain. They will tell you that the street sewers must be ventilated by having perforated manhole covers placed at regular intervals along the line of street sewers—that is, cut off the house from the street sewers by means of a trap, but let the main sewers have free and open connection with the street. Now, as the streets of a town are the sources from which buildings derive their greatest supply of fresh air, my claim is that such a course is wrong and insanitary. Given pure air in the streets and there must be pure air in the buildings, the local cause of air pollution being, of course, excepted. Do away with the trap on the private sewers, continue the interior sewers of the building full size through the roof, carrying them to a sufficient height to be well above adjacent windows; then there will be a natural circulation of air through the entire system of both public and private sewers, and the outlet from the sewers, which is acknowledged to be a necessity, will be above the general line of the house tops and not at the street level, as is the case when the intercepting trap is adopted. The higher temperature of the pipes passing through the building, especially in the cold season, will ensure this circulation at the time when it is most required. Of course, there are exceptions to all rules, and there are, no doubt, in all cities certain places where the local conditions would call for the placing of a trap in the private sewer; such

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power)

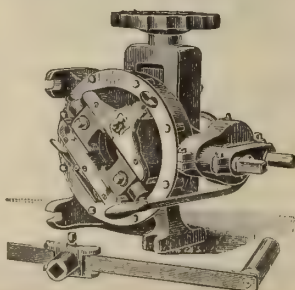
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office.
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

* Read before the American Public Health Association at Philadelphia, October 28, 1897.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

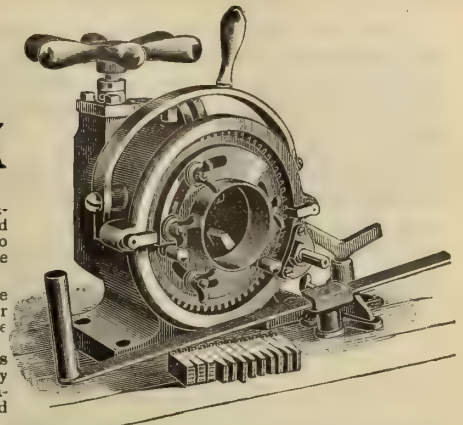
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

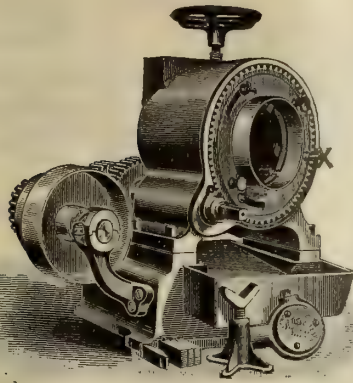
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{2}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.; H. Ooghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co. Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING.



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

cases call for the exercise of the skill and experience of the practical plumber and sanitary engineer. It is no more possible to lay down a rule covering every possible contingency called for in scientific plumbing and ventilating than it is to apply fixed rules to the practice of medicine. If it were, there would be little need of skilled and experienced physicians. The principles of scientific medicine and plumbing are fixed, but the application of these principles calls for the intelligence acquired by education and developed practice.

CODE OF PLUMBING PRINCIPLES.

Much injury has been done by attempting to frame plumbing bylaws that will apply to every case. The conditions vary in almost every building, and to adapt the principles to the special requirements requires not only practical but scientific knowledge. If the American Public Health Association would make a study of the general principles covering this question and embody them in a code having its indorsement, leaving the practical application of these principles to those whose special duty it is to apply them, much good would result. In conclusion, conditions exist in northern climates during that portion of the year when snow is on the ground that completely neutralize the effect of the perforated man-hole covers over the street sewers, and during such time, in cities where the intercept-

ing trap is in general use, the main sewers are without ventilation and a serious condition of affairs exists, as the buildings being heated to a greater degree than the outer air have a cupping action and draw the air from the sewers into them, beneath the frozen and almost impervious top soil and paved roadways. Where the soil is porous this is sure to occur, even when the buildings are situated a considerable distance away from the main sewers.

Sewers breathe! Under certain conditions the air would rush into them; again it is being expelled, with considerable force. Atmospheric conditions partly account for this, but the varying quantities of solid and liquid matter constantly entering and leaving them have an important bearing on the question. Such being the case, proper breathing places must be provided, and any attempt to bottle up the sewer air will end in failure. What place so suitable as above the roofs of buildings, where the winds will disperse the foul gases and the light and air disinfect them?

PLUMBING AND HEATING CONTRACTS.

Alfred Blais & Co., of Montreal, have the following contracts: Plumbing, ventilating and No. 4 Buffalo furnace for E. G. Savage; plumbing, ventilating and No. 4 Stair furnace for Mr. Florance; plumbing, ventilat-

ing and No. 4 Daisy furnace for A. Perron, Chambly, and the plumbing, heating and ventilating of two houses for A. Ramsay & Son.

E. C. Mount & Co., of Montreal, have secured the contract for the roofing, plumbing and ventilating of two stores for A. Nelson & Co., also the plumbing, heating and ventilating of two houses for H. Gault estate.

PLUMBING NOTES.

The city of Brantford put up \$75,000 worth of new buildings during the year.

The assets of G. T. Phillips & Son, plumbers, Quebec, are to be sold on the 13th inst.

Petrolia is building a new school, and The Petrolia Advertiser says that as it nears completion it gives promise of being a handsome structure.

Mr. Frank Brodison will erect a storey-and-a-half brick veneer on Princess avenue, between William and Adelaide streets, London, Ont. It will cost \$950.

Building permits have been issued in Toronto to F. H. Herbert, architect, for a two-storey and attic stone and brick dwelling on the east side of St. George street, south of Lowther avenue, to cost \$10,000, and for a two and a half-storey dwelling on the north side of Bloor street, west of Avenue

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

road, to cost \$5,000, and to Charles Wemmon for alterations at 890 Bathurst street, to cost \$1,000.

The city of St. Thomas, Ont., has been agitated for some time over the erection of a new city hall. Two sites are advocated, and as the parties advocating the two sites are of about equal strength, and as both are determined, the fight is a hot one. Two bylaws were put before the electorate of the city a few weeks ago, but as they were contradictory and "apt to confuse the voter," they are before the courts. If the bylaws are quashed one of the factions is determined to build a \$75,000 city hall on its favorite site.

FREEZING A SERVICE PIPE.

A CORRESPONDENT of The Metal Worker writes: "I have some work to do on a system where there are no means of shutting off the water supplied to a building, and would like to know if it is safe to stop the water by freezing the service pipe."

In reply The Metal Worker says: "If the service pipe is made of lead there is very little danger of bursting the pipe by freezing it when there is a chance for the water in the pipe to expand in both directions from the point where it is frozen. The work of freezing the pipe is comparatively simple, as are also the appliances that will be needed for doing it. The pipe can be frozen in from half an hour to an hour, depending upon its size and whether or not the water is running at the time freezing is attempted. If it is an ordinary pipe of $\frac{1}{2}$ to $\frac{3}{4}$ inch diameter there will be very little difficulty. To freeze the pipe it is necessary to surround it with a mixture of ice and salt, and a simple and good way to keep this material in contact with this pipe would be to secure a small box of about 16 inches in length, 12 or 14 inches in width and about 12 inches deep. Saw notches in each end of the box about one-half of the depth of the box, and of sufficient width to slip over the pipe. The box should then be moistened with water, and made water tight by being daubed with clay. The box should be placed in position around the pipe and firmly supported. The notches should be made water tight with the clay. Then by breaking the ice into quite small pieces, smaller than chestnut coal, and mixing with it a liberal sprinkling of coarse salt, such as is used in manufacturing ice cream, and filling the box with this, the freezing is only a question of time. It is a simple matter to tell when the pipe is sufficiently frozen to work by driving a small nail into the pipe to see if water comes out. If it still leaks water, the opening should be closed and more time given for the freezing mixture to act."



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works (Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.

"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

DO YOU?

WISH THUS TO BUILD
an advertisement
in the
CONTRACT-RECORD.
TORONTO
will bring you
tenders from the
best contractors



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Good Advertising

For Wide Awake Retailers

By F. James Gibson.

Our "Good Advertising" department is to help our subscribers to do better advertising. The gentleman whom we have selected as its conductor is well known as one of the foremost advertising specialists of the day. Any of our readers who desire the benefit of Mr. Gibson's criticisms on advertisements or advertising methods, or his advice on any advertising subject, can have it or both entirely free of charge by writing to him in care of this journal.

If correspondents so desire, fictitious names or initials may be used for publication. But all requests should be accompanied by the subscriber's name.



ONE of the most difficult things for the amateur advertisement writer to attain is the ability to write naturally. The thing to do is to write just as one talks—that is, if one knows how to talk. I have frequently observed that many men who are good salesmen are poor advertisement writers. Not long ago I stood alongside a salesman in a big New York retail store. I had noticed previously that he was a bright, intelligent young man and I knew that he had made somewhat of a mark as a salesman. On the occasion referred to, I observed that as the people came along he had a winning and otherwise attractive manner. I also noticed that he used plain, common, Anglo-Saxon words and that no attempt was made to be "high-falutin." His words came out easily and convincingly. In very many instances he effected sales. In fact, he was doing well. It occurred to me that he would be a good man to ask about the advertising of his goods. I found that he had some good ideas on the subject and finally I asked him to write up a short ad. dealing with his department. The next day he handed me what he had written. I found, however, instead of writing as he talked, that he had done just the opposite. Instead of using the plain, convincing, every-day language that characterized him as a salesman, he had attempted to use long and unusual words. The whole effect was one of "toploftyness" and bombast. The root of his failure lay in the fact that he lost his naturalness as soon as he took his pen in hand. This is the fault of half or more of the advertisements put out to-day by men of real business ability—men who are perhaps equal to anyone as salesmen and otherwise. But because they try to do something more impressive than usual they make a failure of it. The failure comes because they are not natural—because they do not write as they talk. Of course, there may be the highest art in being natural, as in the case of an actor. But it certainly requires no art in being one's natural self. A man meets a friend in the street and says: "By the way, Smith, I have just opened out a stock of dry goods down in the Thompson block. Give me a call when you want anything in my line. I'll be glad to see you." This is all right. But set that man to write an ad. about his new store. The chances are that he will get off something like this: "John Jones begs to notify his friends and the public generally that he has opened out a stock of staple and fancy dry goods in the Thompson block, where he will be pleased to be favored with a call from intending purchasers." In the one case Mr. Jones is easy and natural. In the other he gets up on stilts and loses his effectiveness.

When you write an ad. write as you talk.

* * *

Catch phrases and expressions are great helps to advertising. A phrase or an expression that slips smoothly off the tongue, that's

easily remembered and that is really suitable, is worth many dollars to an advertising man who knows how to use it. Which of us is not familiar with the "grateful-comforting" of Epps's cocoa, or the "best and goes farthest" of Van Houten's cocoa? "Children cry for Pitcher's Castoria" has probably sold many thousands of dollars worth of Castoria. "You push the button, we do the rest," has been adopted into general use by the English-speaking world. It has come to mean a great deal more than its original application to kodaks. But whenever it is mentioned one naturally thinks of kodaks. Who can measure the value of such advertising as this. Hundreds of thousands of dollars worth of ordinary advertising wouldn't begin to compare with it in real value. A big department store, opened not long ago in New York, electrified the city by putting up sign boards all over the place reading, "Meet me at the Fountain," referring to the big fountain playing in the rotunda of the store. This phrase was also run, and is still being run, at the head of all the firm's ads. So extensively was it used by the firm in question that before three months had elapsed it was the talk of the town. It was copied and parodied by hosts of imitators. It was incorporated in topical songs in the theatres and music halls. It was in almost everyone's mouth. The firm's advertising man who invented the expression more than earned his year's salary (a big salary too) when he hit upon it. Another big New York house has made a great hit with "It pays to buy at Vantine's." A leading Boston dry goods store uses very successfully the expression "The busiest store on Boston's busiest street." Cases of successful advertising catch phrases could be multiplied indefinitely, but enough has been said to show their great value from an advertising standpoint. Let it not be supposed, however, that it is an easy thing to conjure up a really first-class advertising catch phrase. But with enough patience and diligence the ordinary advertiser can probably invent one more or less suitable. But having once found a good one, let him use it for all it is worth.

* * *

One of the snags that beset the feet of the unwary retail advertiser is the entering into contracts with publishers of papers. Many an advertiser finds that he has bound himself down to use a certain space in each issue of a paper. This compels him to use the exact space every time he advertises. Often it happens that he does not really need so much space. Sometimes it occurs he needs more space than his allotted amount. The result is that part of the time his advertisements have a crowded-up appearance and part of the time the printer is compelled to fill the space with big type. It is always best to resist making any contract at all. Say to the publisher that you are anxious to use all the space that you possibly can. Tell him that if he names you his lowest rate you will probably use more than any space you would contract for any way, but that the exact space you will use will depend on conditions which you can't forecast. But if a contract must be made let it be a

contract to use so many lines or inches as the case may be, within, say, one year. Another good arrangement and a fair one all around is to pay the publisher his regular rate and get a discount or rebate

TRADE WINNERS

Are what our Flanneletts are proving these days. They were bought right and when you examine the quality and the prices you will agree with us that the selling price is at the lowest notch. For your benefit (and ours too) we quote the following prices.

10 pieces Fancy Stripe Flannelette 30 inch wide, regularly worth 7c for	5c yd.
5 pieces Dark Stripe Flannelettes 32 inch wide, regularly worth 10c for	7c yd.
10 pieces Heavy Dark Flannelettes, Double and Twisted, regularly worth 15c for	12½c yd.
8 pieces Dark Flannelette Wrapper Cloths, same on both sides, special at	16c yd

MILLINERY DEPARTMENT

Re-opened this week with
Miss Farrer in charge.

Ramsay & Morlock

CASH and ONE PRICE

Calder's Block : Lower Town

cause it gives plenty of specific information about the goods offered for sale. It is also a good ad. because the language is modest and there is no attempt to be smart or funny. It is just a plain and unvarnished business statement. It is convincing and interesting

at the end of, say, each month or each three months. This discount, of course, would be graduated according to the amount of space used.

* * *

I am asked to say what I think of these two advertisements of Ramsay & Morlock's. I am also requested to handle them "without gloves." There can be no question as to which is the better ad. of the two. In fact the flannelette ad. is a good one while the dress goods ad. is a poor one. The reason why the flannelette ad. is good is be-

and \$1.50 a yard. Both the ads. would be better without the ornaments. In fact, the plainer an ad. is set up the better it is as an

ad. I think that Messrs. Ramsay & Morlock would do well to always use the same font of type in setting up their ads. This is especially desirable in the setting up of the firm name. Two different styles of gothic type are used for their firm name in the two ads. If they always used one particular kind of type for this purpose it would be better. A good plan for them would be to get an artist to draw their name in plain and distinct letters with the addition of the words "cash and one price" and the address. From this a plate could be made and duplicates sent to the various newspapers used by the firm for advertising purposes. The design could also be used on the firm's stationery and circulars. By-and-bye the public would become familiar with it. In this sense it would really be a trade mark and a valuable one. I notice that in these two advertisements the name of the town does not appear. In the case of country papers where so large a proportion of the circulation is outside of the places of publication it is probably better always to add the name of the town to all advertisements.

* * *

I have three advertisements of J. A. Hunter, also of Durham, Ont., which I am asked to criticise. I have only room to reproduce the two smaller of them. The head line, "A suit to

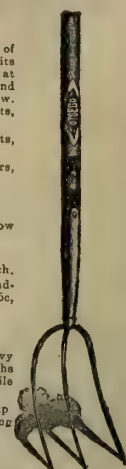
A Suit To Order

\$8.00, not much is it, the best of linings though.

Ready made Suits.

Tuesday next will see a heap of them leave this store. Our Suits that were worth \$6.00, go again at \$3.89. Our Stock of Men's and Youths' Suits was as large as now. Boys' 3 piece Dark Tweed Suits, worth \$4.50 for \$2.99. Children's 3 piece Dark Tweed Suits, worth \$4.00 for \$2.75. Bicycle Suits, Caps, Hose, Sweaters, etc., etc.—
Finest Corn Starch, 4 lbs for 25c.
Best Ginger Snaps, 4 lbs for 25c.
Everything in Hardware at low prices.

Paints, Oils, etc.
Curtain Poles, complete, 25c each.
Table and School Desk Bells, handsomely mounted, regular 35c, Tuesday 12½c each.
Prints, usually 10c at 7½c a yd.
Flannelettes at 5c yd.
Remnants of Cotton, very heavy quality, usually 10c yd, in lengths of 3 to 8 yds. Take one while they last at 7½c a yd.
Fishing Tackle. Lines from 3½c up. Hooks 3c doz up. Bamboo Fishing Poles.



BICYCLE LIVERY NOW RUNNING

Bicycles to rent by the Hour, Day or week. Our wheels, are all brand new and include Cleveland and Crescents, Telephone No. 12. Repairs for Bicycles always in stock. Bicycle repairing (up stairs.)



Try a 1 lb Lead Packet of "Kolona, Ceylon Tea." Positively the most delicious in the world. It costs less than other Teas,—worth 50c, ¼ lb any day at 14c. Put this on your list.



J. A. HUNTER

Dep't Store,

Upper Town, Durham.

DRESS



LENGTHS

Just received

Twenty Five

Dress Lengths in prices ranging from 50c to \$1.50 a yard in exclusive patterns.

RAMSAY

&

MORLOCK,

CASH and ONE PRICE

Calder's Block : Lower Town

head line "Dress Lengths," is not nearly so catchy as "Trade Winners" is. Besides this, not enough information is given. We are not told what kind of dress goods are for sale, what the color are, what the patterns are like nor what the prices are between 50cs

Klondike

isn't in it with the endless list of bargains at

J. A. HUNTER'S

A Special business trip to Toronto last week has enabled us to offer the following bargains while they last:

- 310 yds extra heavy all-wool Tweeds, good patterns, reg 50c at 29c yd.
- 100 yds Heavy Union Grey Flannel, reg 15c at 9c yd.
- 8 pieces Fancy Dress Goods, double fold, reg 25c at 20c yd.
- 120 pr Extra Wool Socks, reg 25c pr, 2 prs for 30c.
- 50 men's unlaundried shirts (white) reg 60c at 37c each, when laundered are worth a dollar.
- 1000 Two Hundred Page Scribbles, 2c each or 3 for 5c.
- 400 yds Heavy Cottonade, reg 25c yd for 20c yd. This is a line worth seeing.
- 60 men's Heavy Grey Check Suits, worth \$7.00, while they last at \$6.00.
- 10 men's Suits odd colors, your choice at \$3.25, some were sold as high as \$8.00.
- 5 pieces Fancy Stripe Denims for Shirting at 15c a yd.
- 5 doz Weighty Shirts and Drawers go from the old price 40c down to a clearing price of 25c each

Buy a quart of Alligator Harness Oil for 20c. It will save you \$5 in harness.

DRINK ONLY

Kolona Ceylon Tea:

J. A. HUNTER,

Dept. Store,

Upper Town.



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

order," indicates that the first part of the first of these two ads. is about clothing. The two cuts would seem to indicate quite a different line of goods. This is a deplorable lack of harmony. The lower section is much better, as the cut is in harmony with the head line. What this ad. really needs is to be divided into sections—say a clothing section, a grocery section, a dry goods section and a hardware section. A few items and prices ought to be quoted in each section. Each of these sections, by proper type arrangement, could be made to stand out by itself. Instead of the ad. having the mixed-up appearance it now presents it would be more artistic in appearance as well as business-like.

The other or "Klondike" ad. is a much better one. It is nearly all about one line of goods (dry goods), and this is better than the "mix up" of the other ad. The principal objection I have in connection with it is the use of the word "Klondike." As a matter of fact the word "Klondike" has been worked to death by advertisers anyway. In the second place, the use of such headlines is based on a wrong principle. The idea seems to be that people are more interested in gold mining in the Arctic circle than they are in where to buy dry goods, groceries, boots and shoes, hardware and such like goods. This is, I believe to be, all wrong. I believe that the people in every community are more interested in making their dollars go as far as possible than they are even in the Klondike mines. This I believe to be particularly true of women, and women, it is well known, comprise about 50 to 90 per cent. of the customers of the retail stores. What shortsightedness, then, for a dealer to go so far away for a subject matter for a headline for his advertisement when he has a whole store full of interesting things to write about. One of the great essentials is for the advertiser to firmly believe in the goods or the store or whatever it is which he is advertising. The fuller he is of it, the more saturated he is with it, the better he can advertise it. A merchant-advertiser who lives up to this standard is likely to think that his store or his business is the most interesting thing on earth, the Klondike not excepted. A natural and proper thing for such a man would be to say something about his store or his goods instead of something quite foreign. And this is the kind of man who succeeds as an advertiser. I was quite struck by a remark made to me recently by the man who so successfully advertises Sapolio. He said: "I think of Sapolio by day and I dream of it by night. I eat Sapolio and I drink Sapolio. I am Sapolio all through."

At the bottom this ad. says, "Drink only Kolona Ceylon Tea." Whether Kolona is a package tea or a bulk tea is not stated. If a package tea, whether it comes in pounds or half pounds or both is not stated. Yet these are all points on which the public need more or less instruction. I happen to know that Kolona is one of the numerous excellent brands of Ceylon tea on the Canadian market, but everyone within shopping distance of Durham does not know

this. If I were a merchant in Durham and wanted to push the sale of Kolona tea, I would put out some advertising like this:

Millions of pounds of tea are spoiled every year through being handled loose or in bulk.

KOLONA CEYLON TEA is sold only in air-tight pound and half-pound packets, which preserve the strength and flavor.

60c. a pound, 30c. for halves.

Are you satisfied with the tea you drink?

If not, why don't you try **KOLONA**? It is a pure, high-grade Ceylon tea.

Put up in air-tight pounds and halves.

60c. a pound, 30c. a half.

One of the reasons why Ceylon teas are so much better than China teas is because they are cleaner.

They are cleaner because in the picking, curing and packing of the leaf, the handling is done almost entirely by machinery.

KOLONA TEA is a pure, high-grade Ceylon tea.

In air-tight pounds and halves, **60c. and 30c.**

ACETYLENE LIGHTING COMPANY.

An application for letters patent for the incorporation of a company to be known as the Acetylene Lighting Co., Limited, London, Ont., will be shortly made to the Governor-General-in-Council. The purpose of the company is to manufacture and sell apparatus for the production and burning of acetylene gas for illuminating and heating purposes, and to buy and sell patents in regard to the manufacture or use of acetylene gas. The capital is to be \$15,000, divided into 150 shares of \$100.

The Quebec timber business seems to have enjoyed a very healthy season. The quantity of waney white pine culled at that port to date is 4,311,340 feet, or double that of last season at the same time. White pine reached 832,589 feet, nearly treble that of the preceding year; while red pine shows 211,217 feet, four times the quantity of last season. There is also an increase of about 25 per cent. in elm and ash, the figures being 622,577 and 132,425 respectively.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL

CURRENT MARKET QUOTATIONS

TORONTO, Nov. 12, 1897.

3/4 inch and thicker..... 1 75

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. 6 25
I.X.X. 7 50

J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Raven & P. D. Grades—
I.C., usual sizes 4 25
I.X. 5 00
I.X.X. 5 75
D.C., 12 1/2 x 17 3 00
D.X. 3 75
D.X.X. 5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Cessemmer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base... 3 15
20x28 6 25

Charcoal Plates—Terne.

Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 7 50
I.X., Orion 7 50

Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs } Per lb.
14x60, " } 0 05 1/4 0 06
14x65, " } 0 05 1/4 0 06

Tinned Sheets.
72x30 up to 24 gauge..... 0 06 0 06
26 " 0 06 1/2 0 07 1/2
28 " 0 07 1/2 0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs 1 50 1 55
Refrined " 1 80 1 85
Horse Shoe " 1 80 1 85
Band " 1 75 1 80
Hoop " 2 00 2 05
Swedish " 4 00 4 25
Sleigh Shoe Steel " 2 50 2 55
Tire Steel 2 75 3 00
Machinery 0 10 0 14
Cast Steel, per lb. 0 10 1/2 0 11
Russian Sheet, per lb. 2 00 2 25
Tank Plates, 1-5 and thicker. 2 00 2 25
Boiler Rivets 4 50 5 00

Boiler Tubes.

1 1/2-inch 0 06 1/2 0 07 1/2
2 " 0 07 1/2 0 09 1/4
2 1/2 " 0 09 1/4 0 11

Steel Boiler Plate.

3-16 inch 2 00
" 1 90

Sheet Iron.

16 gauge and heavier..... 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 25 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 30
All bright..... 2 90

Iron Pipe.

Wrought, 1/4 to 3/8 inch, \$1.87; 1/2 inch, \$2.35;
3/4 inch, \$2.87; 1 inch, \$3.87; 1 1/4 inch,
\$5.10; 1 1/2 inch, \$6.38; 2 inch, \$9.25 per
100 feet.
Galvanized, 1/2 inch \$4 to \$4.25, 3/4 inch \$4.80
to \$5.1 inch \$6.75 to \$7, 1 1/4 inch \$9.25 to
\$9.62 1/4, 1 1/2 inch \$11.75 to \$12.25 per 100
feet.

Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge..... 0 03 3/8
18 to 24 gauge..... 0 03 3/8
26 " 0 04 1/8
28 " 0 04 3/8

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " 4 75
" 5-16 " " 4 00
" 3/8 " " 3 75
" 1/2 " " 3 35
" 5-8 " " 3 25
" 3 " " 2 95
" 7-8 " " 2 85
" 1 " " 2 75

Trace, per doz. pairs..... 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards..... 0 13 0 50

Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards..... 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 3/4 12
Lake Superior.....

Bolt or Bar.

Cut lengths, round, 1/2 to 3/4 in. 0 20 0 22
round and square
1 to 2 inches..... 0 18 0 19
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes..... 0 15 0 16 1/2

NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.

Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)
4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
35 to 45 " 0 15 1/2 0 16 1/2
50 lb. and above, " 0 15 0 16

Boiler and T. K. Pitts.
Plain Tinned, per lb 0 21
Spun, per lb..... 0 25

Wire.
Pure, in coils—
From 1 to 20 gauge, 12 1/2 p.c. off list.
From 20 gauge up, 12 1/2 p.c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c.
off list.
ests, hard-rolled, 2x4 0 20

Zinc Spelter.

Foreign, per lb 0 04 1/2 0 05
Domestic " 0 03 1/2 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/2
Part casks..... 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 1/2
Sheets, 3 to 6 lbs., per sq. ft.,
by roll..... 0 04 0 04 1/2

NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 2 1/2 p.c. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Per lb. Per
Bar half-and-half 0 11 0 11 1/2
Standard 0 10 1/2 0 11
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb..... 0 08 0 08 1/2

Anti-Friction Metal.

Per lb.
"Beaver" brand \$0 20
"Tandem" A 0 19
"B 0 16
"C 0 10 1/2

White Lead.

Pure, Assoc. guarantee, ground in oil,
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 00
Brandram's B. B. Genuine..... 7 50
No. 1 6 75
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine..... 6 70
No. 1..... 6 20

Prepared Paints.

(In 1/2, 1 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon... 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 05
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J.F.L.S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt..... 3 00 3 25
American Oxides, per cwt... 1 75 1 90
Canadian Oxides, per cwt... 1 75 1 90
Burnt Sienna, pure, per lb... 0 10
Umber, " 0 10
do. aw 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2



Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb. 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb. 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs.....
25-lb. Irons.....
-lb. Boxes.....

Sulphate of Copper.

Casks, for spraying, per lb..... 0 04 3/4
100-lb. cases, do. per lb..... 0 05

Putty.

Bladder in bbls., per 100..... 1 75
Bulk 1 65
100-lb. cases (tins) per 100..... 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish..... 0 85
Extra do. 0 90
Denar Varnish 1 60
Hard Oil Finish..... 1 40
Orange Shellac Varnish..... 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net..... 0 42 0 43
Boiled, per gal. net..... 0 45 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net..... 0 48
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lot..... 0 11

Cod Oil, Etc.

Cod Oil, per gal..... 0 50 0 55
Pure Olive..... 1 20
Neatsfoot..... 90

Glue.

(In bbls.)
Common 0 07 3/4 0 08
French Medal..... 0 10 0 10 1/2
Cabinet, sheet..... 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear..... 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to 25
30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Military,
Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and"
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p.c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge.....	0 25	
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.		0 10	0 12½
Per lb. Anvil and Vice combined, each.....	4 50		
Wilkinson & Co.'s Anvils, lb.	0 09	0 09½	
Wilkinson & Co.'s Vices, lb.	0 09½	0 10	

Augers.			
Gilmour's, discount 65 p.c. off revised list.			
Hollow Steam's, per dozen.....	13 00	20 00	
Adjustable Steam's, each.....	5 50	6 50	
Post-hole, Vaughan's, each.....	1 35	1 60	
Excelsior, Jennings', discount 50 per cent.			

Awls.		0 65	1 59
Sewing, per gross.....	0 65	1 25	
Pegging, ".....	0 85	1 60	
Brad, ".....	3 60	30	
handed, per gross.....	0 45	1 60	
Saddlers', per gross.....			

Awl Hafts.		7 25	8 00
Patent Peg, oss.....			
Sewing, per gross.....			

Awl and Tool Sets.		2 80	3 30
Millar's Falls, per doz.....			

AXES.		5 25	5 50
Splitting Axes.....			
Chopping Axes.....			
Black Prince.....	7 25	7 50	
Forest Clipper.....	7 25	7 50	
Lance.....	8 50	9 00	
Mann's.....	8 00	8 25	
Maple Leaf.....	9 50	10 00	
Hand Made.....	7 50	7 75	
Climax.....	8 00	8 25	
Phantom.....	8 25	8 50	

Axle Grease.		6 00	13 00
Per gross.....			

Bath Tubs.		3 90	4 0
Zinc, discount.....			
Copper, discount, 40 and 10 p.c. off revised list			
Steel clad, 20 per cent. discount off revised list.			

Boxing extra			
Bells.			
Hand.			
Brass, 60 per cent.			
Nickel, 53 per cent.			

Door.		5 50	8
Gon Sargent's.....			
Peterboro', discount 50 per cent.			

Cow.			
American make, discount 66½ per cent.			
Canadian, discount 45 and 50 per cent.			

Farm.		1 25	3 00
American, each.....			

House.		0 35	0 40
American, per lb.....			

Bellows.		3 35	4 75
Hand, per doz.....			
Moulders', per doz.....	7 50	10 00	
Blacksmiths', discount 60 per cent.			

Belting.			
Extra, 40 and 10 per cent.			
No. 1, leather, discount 60 per cent.			
Standard, 55 per cent.			
Agricultural, 65 and 5 p.c.			

Bench Stops.		5 00	6 00
Per doz.....			

Bits.			
Auger.			

Gilmour's, discount 65 and 5 per cent.			
Excelsior, discount 60 per cent.			
Rockford Common, 65 to 65 and 5 per cent.			
Perfection, 50 and 10 per cent.			
Jennings' Gen., net list to 5 p.c. discount.			

Car.			
Gilmour's, 47½ to 50 per cent.			

Expansive.			
Clark's, per cent.			
Excelsior, 10 per cent.			

Gimlet.		0 65	0 90
Clark's, per doz.....	1 00	1 50	
Diamond, Shell, per doz.....	2 25	5 20	
Nail and Spike per gross.....			

Blind Rollers.		1 25	1 75
Annex, per doz.....	1 35	1 85	
Mascott, ".....	1 12	1 20	
Ermine, ".....			

Blind and Bed Staples.		0 7½	0 12
sizes, per lb.....			

Bolts.			
Carriage, dis., 70 p.c. off new list			
Tire, dis., 70 and 5 per cent.			
Store dis., 70 per cent.			
Elevator, dis., 35 to 40 per cent			
Machine, dis., 70 p.c.			
Coach Screws, dis. 80 p.c.			

Boring Machines.		5 00	7 50
Complete, with augers, each.....			

Braces.		6 00	7 75
Barber's.....	10 00	11 00	
Barber's Ratchet.....	2 00	2 75	
Farmers.....	15 50	29 00	
Mar's Falls.....			

Brackets.			
Shelf.			

Japanned Canadian, per doz.		0 50	3 40
pairs.....			
Berlin Bronze Canadian.....	0 85	3 20	

Broilers.			
Light, dis., 65 to 67½ per cent.			
Reversible, dis., 65 to 67½ per cent.			
Vegetable, per doz., dis. 37½ per cent.			
Henis, No. 8.....	6 00		
Henis, No. 9.....	7 00		
Queen City.....	7 50	10 00	

Butchers' Cleavers.		4 23	
From 8 to ch, per doz.....			

Butts.			
Brass.			

Wrought Brass, dis., 17½ p.c. revised list.			
Cast Iron.			

Loose Pin, dis. 70 per cent.			
Wrought Steel.			

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			
Berlin Bronzed, dis. 70, 70 and 5 per cent.			
Gen. Bronzed, per pair.....	0 40	0 65	

Can Openers.		9 00	10 00
Acme, per gross.....	3 75	4 50	
Sardine Scissors, per doz.....			

Card.		0 60	1 00
Horse, per do.....			

Carpet Stretchers.		1 00	50
American, per doz.....	6 50		
Bullards, per doz.....			

Carpet Sweepers.		22 50	
Bissell, per doz.....	21 75		
World, ".....	24 00		
Daisy, ".....	18 00		
Star.....	29 00		
Crown Jewel, per doz.....	24 00	33 00	
Grand Rapids, ".....			

Cartridges.			
(See Ammunition.)			

Castors.			
Bed new list, dis. 55 to 57½ per cent.			
Plate, dis. 52½ to 57½ per cent.			

Cattle Leaders.		8 50	9 50
Nos. 31 and 32, per gross.....			

Cement.		2 50	
Canadian, Portland.....	2 50		
English.....	2 35		
Belgium.....	1 10		
Canadian hydraulic.....			
Figures are for barrel lots.			

Chalk.		0 45	0 75
Carpenters' Colored, per gross.....	0 60	0 65	
White lump, per cwt.....	0 05	0 06	
Red.....	0 14	0 18	
Crayon, per gross.....			

Chisels.			
Socket, Framing and Firmer.			

American, dis. 75 to 77½ per cent.			
Canadian, dis. 50 and 10 per cent.			
Tanged firmer, per doz.....	0 85	4 00	

Churns.			
Daisy or Leader, dis. from stock or factory			
60, 10 and 10 per cent.			
Steel, net.....	3 00		

Clamps.		3 00	10 00
Judds', dis. 20 per cent.			
stearns, per doz.....			

Clips.			
Axle dis. 65 per cent.			

Coffee Mills.		3 60	13 00
Box.....	3 60	4 00	
Side.....	1 35		
Enterprise, No. 0.....	70		
No. 2.....			

Compasses, Dividers, Etc.			
American, dis. 62½ to 65 pe cent			

Cradles, Grain.			
Canadian dis. 25 per cent.			
Dies.			
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			

Door Springs.		2 00	
Torrey's Rod, per doz..... (15 p.c.)	0 88	1 60	
Coil, per doz.....	2 00	4 00	
English per doz.....			

Draw Knives.			
American, dis. 70 and 10 per cent.			
Canadian, dis. 25, 50 and 10 per cent.			

Drills.			
Hand and Breast.			

Miller Falls, per doz.....		16 00	51 50
P. S. & W., dis. 40 per cent.			

DRILL BIT.			
Morse, dis. 37½ to 40 per cent.			
Standard, dis. 50 and 5 to 55 per cent.			

ELBOWS.			
Stovepipe.			

Per doz.....		75	1 70

Enameline.			
No. 4—3 dozen in case.....	24 50		
No. 6—3 dozen in case.....	7 20		

FAWCETS.		0 30	0 35
Cork Lined, per doz.....	1 30	3 25	
Wine, per doz.....	2 80	3 90	
Star.....			
Fenn's Corkstops, No. 2, per dozen.....	1 70		
Petroleum, per doz.....	4 50	6 50	

FILES AND RASPS.			
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			
Black Diamond, 50 and 10 to 60 per cent.			
Kearney & Foutte, 60 and 10 per cent. to 60, 10 5.			
Nicholson File Co., 50 and 10 to 60 per cent.			
Heller's Horse Rasps, 50 per cent.			
Jowitt's, English list, 25 to 27½ per cent.			
American, 60 to 60 and 5 per cent.			
Great Western, 60 and 10 per cent.			

FLUTING MACHINES.		0 60	2 00
Each.....			

FORKS.			
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.			

FREEZERS			
Ice Cream.			

Gem from \$1.25 to \$7 net.			
White Mountain, dis. 50 p.c.			
Arctic, dis. 50 p.c.			

FRUIT PRESSES.		3 25	3 50
Henis', per doz.....			
Enterprise, dis. 10 per cent.			
Shepard's Queen City, dis. 15 per cent.			

FRY PANS.			
Acme, dis. 65 to 67½ per cent.			



CHARLES F. CLARK,
President.

J. CHITTENDEN,
Treasurer

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY,
Executive Offices Proprietors.

NO. 346-348 BROADWAY, NEW YORK

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The Bradstreet Company is the oldest and, financially, the strongest organization of its kind—working in one interest and under one management—with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

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Three valuable articles full of ideas and suggestions for grocery men.

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If so, say so in **HARDWARE AND METAL**. It reaches the most likely buyers. Two cents a word each insertion.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

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Hardware and Metal, Toronto

E. T. WRIGHT & CO.

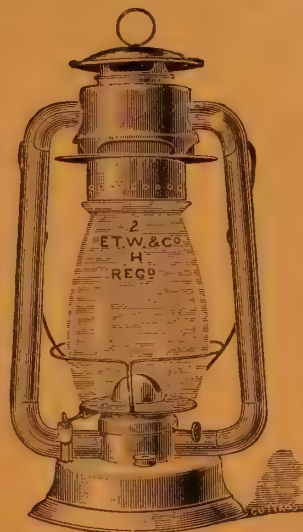
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of

Tubular and
Cold Blast
Lanterns

Bird Cages
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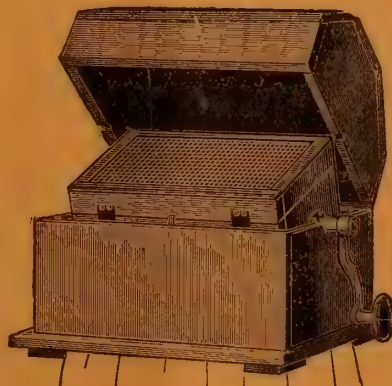


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HAMILTON,
Canada.

Manufacturers of

HIGH GRADE PIG IRON.



Now is the time

to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.

Manufactured
by . . .

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Inc. 1895

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

Awarded
By **JURORS** at
International Expositions
Special Prize

Gold Medal at Atlanta, 1895

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WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

"IT HAS NO EQUAL"

That is what all our customers
are saying of . . .



Robertson's Pure Prepared Paint

If you are not already handling our Paints, Oils or Varnishes,
send us a trial order, we feel sure you will be well satisfied
with the result.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, **Toronto**

Telephones 819, 1511 and 1292.

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Copper, Tin, Antimony, etc.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, NOVEMBER 20, 1897

No. 47



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In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

Beware of Fraudulent Imitations.

MAGNOLIA METAL COMPANY

LONDON OFFICE—40 Queen Victoria St.
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Address.

Replies to be sent
not later than
November 20th

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Under the British Flag.**

Others use them, why don't you?

"Safford" PATENT Radiators

For Hot Water and Steam **HEATING**

Made from Canadian Materials
By Canadian Capital
With Canadian Brains
By Canadian Machinery
And Canadian Labor

Positively the only Heaters made without Bolts or Packing

THE . . .

TORONTO RADIATOR MFG. CO

Limited
Toronto, Ont.



TO THE TRADE.

WE ARE CARRYING IN STOCK FOR THE



Christmas Trade

an assortment of

Tool Boxes

To retail at \$5.00, \$7.50, \$10.00,
\$15.00, \$20.00 and \$25.00 each.

Also the following makes of

SCROLL SAWS AND LATHES

Prize Demas

New Rogers, Nos. 1 and 2

Companion

etc., etc.

Write us for prices.

RICE LEWIS & SON

Hardware Merchants

(Limited)

TORONTO



A Complete Lavatory

The cut shown illustrates our **Patent**

COMBINED BATH AND WASH BASIN



Hot and Cold Water Supplied to Bath and Basin.
Waste from Basin **DOES NOT** Discharge into Bath.

SEND FOR PRICES

**The Toronto Steel-Clad Bath
and Metal Co. Limited.**

125 and 127 Queen St. East, **TORONTO**

Keep a Little Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price.

**NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP**

Are you ready for the Fall
Trade in this line?



Patented 1890

KEMP MANUFACTURING CO.

Toronto

BERTRAM, WILSON & CO.

SPECIAL PRICES ON

TOOL STEEL
 DRILL STEEL
 PICKS
 MATTOCKS
 CROW BARS
 AXES
 FILES and SAWS

IRON, STEEL
 HARDWARE and BICYCLE
 MERCHANTS

53 Yonge St.
 TORONTO

TRADE



MARK

It is a well known
 fact . . .

that no other goods are as carefully made and inspected as

TRADE



MARK

Henry Boker's Hardware Cutlery, etc.

Buy his goods Take no other
 and you will capture the cream of the trade.

BEST ASSORTMENT ALWAYS ON HAND.

TRADE



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Rice Lewis & Son

LIMITED

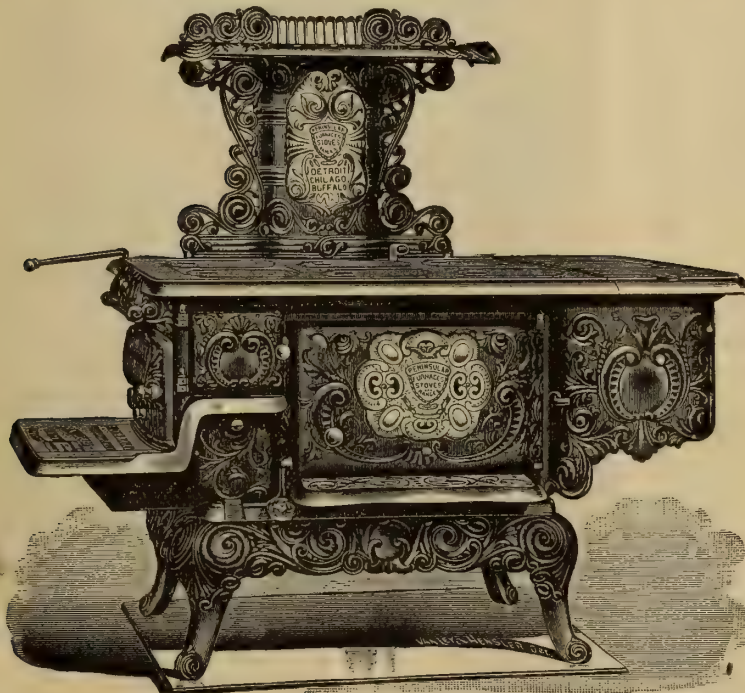
TORONTO

TRADE



MARK

NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new goods with same dress as the Granite Range, which is acknowledged to be the prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO. 

PRESTON, ONT.

ALWAYS COLD.

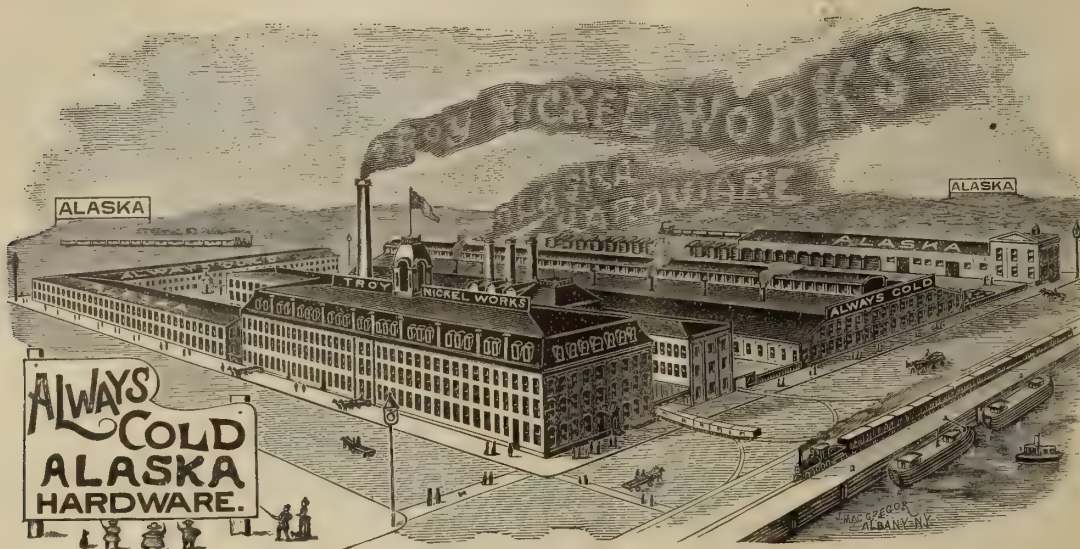
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc, Etc.



To Canadian Trade

If your Jobbers don't carry this line send to us for prices. We will land the goods at your door. WRITE US ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

It's the most powerful furnace of its class in the market.

OUR

Little Ox

WOOD FURNACES

have been thoroughly tested in the severest weather and proved the truth of all our claims.

They are made Portable or Stationary for Brick Setting and have either Double or Triple Return Flue Radiators, giving them an immense fire travel.

They have an extra large fire door.

Are smoke and dust proof.

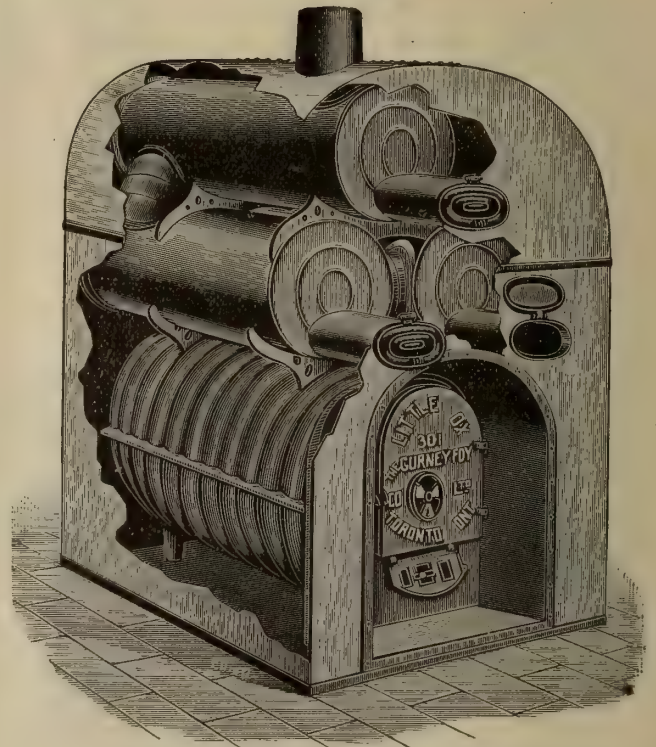
Easy to manage and regulate.

Take 3-ft. rough wood.

Have a capacity from 15,000 to 30,000 cubic feet,

and can't be equalled by any other furnace in the market.

Write us for catalogue and prices. Satisfaction is sure.



Portable—with Triple Return Flue Radiator.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



J. BAYNE MacLEAN, President.
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THE MacLEAN PUB. CO.
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TORONTO: 26 Front St. W. Telephone 2148.
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John Cameron, General Subscription Agent.
Major A. G. Campbell, General Subscription Agent.

LIGHT STOCKS OF CEMENT.

THE question of winter supplies of cement at Montreal this year becomes an interesting one as navigation draws to a close.

As pointed out before, stocks in store are exceedingly light for the season, and, as there is little on the way, the possibilities of a scarcity this winter become a certainty, as the arrivals have not been up to expectations. Indeed, some importers express the fear that they may not be able to carry out their contracts.

They have endeavored, ever since the scarcity became evident a month and a half ago, to increase their importations by the last steamers from Belgium, but found it impossible to secure any radical enlargement of their contracts. The Belgian cement makers have had an unusually busy season this year, for, in addition to an increased demand from this continent, the enquiry on domestic account is reported to have been much larger than usual.

Last year the English cement supplied in the vicinity of 50 per cent. of the Canadian import demand. This has not been the case this season, as the price of the British

article drove more than the usual share of the demand to the Belgian article.

The advance in British cement has averaged fully 15 per cent. from the low point, or about 16c. per barrel, which sent it away above the majority of buyers' views.

The imports of British cement this year have been only 36,439 barrels, whereas there has been 129,527 barrels of Belgian imported.

The extensive works being carried on at the Victoria Bridge in Montreal has largely increased the local consumption of cement, and has a good deal to do with the light stocks now complained of.

UNITED STATES CUTLERY.

While the United States is making a determined effort to succeed in the manufacture of cutlery the makers over there have still to use English steel in order to secure the best results.

A well-known Canadian cutlery expert, who has recently been making a tour of some of the cutlery factories in the United States, in conversation with **HARDWARE AND METAL** stated that he had learned this from conversation with makers of cutlery.

American steel worked up nicely, but the difficulty was that it could not be tempered beyond a certain point, and that point was not the desired point when a high-class article of cutlery was desired.

Steel manufacturers in the United States assert, on the other hand, that by importing and using Swedish bars they do turn out a first-class article. This may be true; but that does not alter the fact that it possesses not the peculiar properties necessary to making first-class cutlery.

A BRISK STOVE TRADE.

THE cold weather which developed a few days ago has induced a demand for stoves and furnaces which it is no exaggeration to say is extraordinary.

During the last few days orders by letter, telegram and telephone have been pouring in upon the manufacturers at such a rate that they have been unable to fill them. The larger portion of the demand is for stoves.

The stove and furnace trade this season has been a somewhat remarkable one, and is another evidence of the revival of business in the Dominion.

Compared with a year ago the volume of business this season has so far been fully 25 per cent. larger. And while the improvement in business is general all over the Dominion, yet the increase is chiefly on Manitoba and Northwest account.

Not only has the trade during the last three months been much larger than last year, but comparing the whole of 1897 up to the present with the same period of 1896 the results are favorable to the present year of grace.

Manufacturers tell us that for this time of the year they were never so busy as they now are, while some of the largest ones state that their stocks were never so low. In some lines of stoves **HARDWARE AND METAL** knows for a fact that they are unable to fill orders, while some manufacturers are picking up a stove here and a stove there from retailers who can spare one in order to supply others whose necessities are pressing.

ENGLISH BRASS GOODS IN CANADA

MR. W. WILLIS MITCHELL, representing James Cartland & Son, manufacturers of cabinet, furnishing and other descriptions of brass goods, Birmingham, England, is in Toronto this week in the interests of his firm.

Mr. Mitchell is what may be termed a "globe trotter," having for more than a quarter of a century been circumnavigating the world in the interest of James Cartland & Son, but this is his first visit to Canada, although his firm have for a great many years been sending their goods to this country.

"Why is it," I asked, "that while Canada is so much nearer to Great Britain than Australasia that your firm has sent you to the Antipodes and not to this country?"

"Well," he replied, "we have had the idea that Canada has become so thoroughly Americanized that it was not worth our while to send a representative. This has been the opinion of not only our firm, but a great many others as well. However, I am satisfied we made a mistake. And after what Canada has done for us in the way of a preferential tariff we have made up our minds to get into closer touch with the trade here. I am satisfied of this: If our house had, during the last fifteen years, paid closer attention to the Canadian market, the Americans would not have the hold upon it they now have. And what applies to our house applies to others. I was surprised at the crudeness of many of the patterns and the quantity of cheap, nasty stuff sold here.

"Had we sent practical men out here I am satisfied the conditions would not have been the same as they now are. What was wanted was a practical man on the spot, and because there was not such, Canadians naturally gave their orders to United States firms. Even in England we have had a great deal of cheap American goods, but the storekeepers have a great many of them on their shelves and consequently they are tired of them."

"But English houses have not been willing to fill orders for goods which differed from the patterns they were accustomed to make," I interposed.

"Yes, I know that. A great deal of the trouble in this respect has been due to the workingmen. There was a time when, if

we wanted something made of a different pattern from that which they had been accustomed to make, they would demur. 'I have been making such and such a pattern all my life, and my father did so before and I don't want to make anything different,' is in effect what they used to say. But that is changing. We have got rid of such men, and what with technical schools and one thing and another, we have a much more intelligent and better class of workmen than in the years gone by."

Mr. Mitchell has been in Canada three or four weeks and he is much pleased with the results. "I have really done a great deal more business than I expected," he explained.

CANADA'S WINTER PORTS.

DURING the course of an article on trade relations between Canada and the United States The N.Y. Journal of Commerce a few days ago made the extraordinary statement that in the winter months Canada can reach the sea only through the ports of the United States.

We take it for granted that our contemporary had reference only to the Atlantic coast, for on the Pacific coast of the Dominion there is no more winter than there is in the south of England. But it surely could not have been thinking what it was saying when it asserted that Canada was dependent upon the United States for an outlet to the Atlantic during the winter months. The Journal of Commerce has always been most fair in its treatment of Canada and we can explain its divergence from the truth in no other way.

But whatever may be the reason, to make such a sweeping assertion is inexcusable. As winter ports St. John, N.B., and Halifax, N.S., have been well-known for scores of years, and even in the columns of our contemporary items regarding these places as such have from time to time appeared.

We have not to hand at the moment the figures relative to the winter shipping trade of the two ports, but it is large. The steamship lines, however, which regularly run out of St. John and Halifax during the winter demonstrates that these ports are of no small importance.

From St. John the Beaver line gives a weekly winter service to Liverpool, the first

boat sailing on December 8th. The boats of this line and their tonnage are: Gallia, about 6,400 tons cargo measurement; Lake Ontario, 4,660 tons; Lake Superior, 4,900 tons; Lake Huron, 4,100 tons; Lake Winnipeg, 2,300 tons. Then there is the Donaldson line with a fortnightly service to Glasgow, the Alcides, 4,500 tons; the Concordia, 4,500 tons, and the Keemun, 4,376 tons. The Allan line runs a fortnightly service to London, and the Head line a fortnightly service to Dublin and Belfast, while another line is being organized to run to Aberdeen and Newcastle. Then there is the Pickford and Black line to Bermuda, West Indies and Demerara, running monthly.

From Halifax there is the Furniss line to London. This is a fortnightly service. The boats of the Canada and Newfoundland Steamship Co. sail from Halifax for Liverpool via St. John's, Newfoundland, and arrangements are being made for running a direct line of steamers through from Halifax to Manchester, the first boat to sail early in December. The steamers of the Red Cross line ply regularly between Halifax and St. John's, Newfoundland, the year round. The Coastal is another line which runs to Newfoundland. Halifax is, of course, one of the winter ports of call for the Allan line, and out of this same port also regularly run the steamers of the Pickford and Black line to Bermuda, Turk's Island, Jamaica, St. Thomas, St. Croix, St. Kitts, Dominica, Martinique, St. Lucia, Barbadoes, Trinidad and Demerara.

In addition to the lines enumerated there are others which either make Halifax or St. John terminal ports or ports of call during the winter months, but we have gone quite enough into details to prove our case, if proof at all was necessary.

If there were not rivals in business there would be fewer survivals. Competition is the life of trade.

ADVANCE IN CHURNS.

A change has been made by the manufacturers in the price of churns, the discount now being 60, 10 and 5 per cent., instead of 70 per cent. as formerly.

This is equal to an advance of 14 per cent.

The delivery points are Toronto, Hamilton, London and St. Mary's.

HAVE REASON TO BE THANKFUL.

CANADIANS have often had good reason to be thankful, but during this coming Thanksgiving Day they have probably more reason than ever for so being.

Not only has our country been blessed with abundant crops, but in many other ways as well.

The year 1897 will undoubtedly be looked upon as a memorial one in Canadian history. In Great Britain, in the United States, in fact the civilized world over, Canada has in a few months assumed a prominence which one would have imagined would have taken years instead of months to accomplish.

The Klondike is in everybody's mouth in nearly every quarter of the globe, while the Kootenay and Northern Ontario gold fields are receiving scarcely less prominence.

As a field for agricultural settlers Manitoba and the Northwest Territories are at last being estimated at their proper value, not only in Europe but in the United States as well.

The exports the present year are the

largest we ever had, and new markets are being opened up for Canadian fruit in Great Britain.

Canada can afford to be liberal in its thanksgiving and free in its disposal of turkey on Thursday next.

EVIDENCES OF BETTER TIMES.

The clearings at the Toronto banks last week aggregated \$9,101,462, against \$8,449,205 the same week last year and \$6,573,720 the same week in 1895. In Winnipeg the clearings were \$3,578,281 against \$2,174,127 the same week last year and \$1,981,395 in 1895. In Montreal the clearings were \$15,099,019 against \$13,462,176 in 1896 and \$14,803,751 the same week in 1895.

The earnings of the Grand Trunk the first week in November were \$521,770, against \$486,913 the corresponding week of 1896, and the earnings of the Canadian Pacific were \$627,000 against \$522,000 last year.

The clearing houses and the railways are the recognized barometers of trade, and it needs no translation in order to understand their present reading.

THE DOMINION TRAVELERS.

THE Dominion Commercial Travelers' Association held their quarterly meeting at Montreal last Saturday, and the meeting was largely attended. The positions in the association's gift this year are more keenly sought for than usual, as there will be a contest for the offices of president and treasurer.

The Hon. J. D. Rolland and Max Murdoch are in the field for the presidency, while Fred. Birks and Thomas L. Paton are to have a friendly contest as to which is the fit and proper person to look after the association's bank account.

The elections by acclamation were: A. T. Le Sueur, vice-president; directors, Wm. Brewster, J. E. Wright, Gus Harris, J. L. Lauthier, and Geo. A. Mann, and auditors, Riddell and Common.

The poll for the election of officers will close on December 17 at 5 p. m., L. Lefebvre and G. A. Mann being scrutineers.

The association will hold its annual meeting on December 18. It was decided to hold the annual dinner, the details of which were left to a special committee. There seems to be a feeling among the members that the annual dinner, which has so long been a feature, has outlived its usefulness, and this re-union, many think, will be the last.

THE ONLY WAY

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

STOVE MAKING.

THE first method in vogue in the manufacture of stoves would be curious to see in these end of the nineteenth century days, says Stoves and Hardware Reporter. It has been ascertained that stoves have been in use in one form or other for about 5,000 years. We do not believe that their usage could have been universally prevalent at such an early period, as we read of ancient palaces, strongholds or homesteads heated entirely by an immense open fire which usually occupied the whole side of the large room, which was used often as kitchen, dining-room, sitting-room and, in some cases, bedroom also.

Some of the first cook stoves were made of copper. They were used for burning wood. No mention is made of an oven; therefore we presume that the primitive cooks did not possess this luxury. It was many centuries after this period before iron founding was successfully developed. Before this process was discovered iron and steel implements must have been made by hammering them into the desired shape. We surmise this much from the fact that tools (which have been found in or near the graves of the ancients) such as axes, hatchets, knives, etc., were often exceedingly dull on the edge, and must have been a trial to the patience of sundry paterfamilias in getting wood to keep infant aborigines warm.

History tells us that one of the first attempts in casting in iron dates back to 1543, when it was tried in Sussex, England. The smelting was done by wood charcoal, and was not commercially successful. The melting of iron by means of coal was tried in 1619, but the first really successful commercial enterprise in the way of iron founding was started in 1735 by Abraham Darby at Coalbrookdale, where the present iron company of that name is now established, and this is the oldest established concern of the kind now in existence.

It has required more than a century of time to bring the casting of metal to the high degree of perfection in which we see it now used in its various forms, as in heating and cooking apparatus, firearms, pipes, tubing, etc. New inventions have brought these improved conditions within our reach and assisted civilization more than anything else. He who invented the art of printing, for example, promoted the mental growth of man in an inestimable manner. Without it, knowledge of human affairs were well nigh impossible, while some of the greatest intellects that the world has ever known would not have been able to leave any lasting monuments of their work for future

generations to study and emulate. In what condition was man before he knew how to read, or before there were books to be read? Tools and machinery made all this possible.

PIG IRON PRODUCTION.

THE IRON AGE in its review of the pig iron production for October says: "As was expected the month of October developed a further expansion in the production of pig iron in this country, and the output is now quickly approaching the highest records achieved during the close of 1895 as the outcome of the short-lived boom of that year. It is noteworthy, however, that stocks have still declined during October at a rate which, however, indicates that the present production has come up to consumption, assuming that the latter has not fallen off during the last few weeks.

The weekly capacity of the furnaces in blast on November 1 compares as follows with that of preceding periods:

	Furnaces in Blast.	Capacity Per Week. Gross tons.
November 1, 1897	183	213,159
October 1	171	200,128
September 1	161	185,506
August 1	152	165,478
July 1	145	164,064
June 1	146	168,380
May 1	146	170,528
April 1	153	173,279
March 1	150	169,986
February 1	154	162,959
January 1	154	159,720
December 1, 1896	147	142,278
November 1	133	124,077
October 1	130	112,782
September 1	145	129,500
August 1	173	157,078
July 1	191	180,532
June 1	194	182,220
May 1	196	189,398
April 1	200	187,451
March 1	207	189,583
February 1	215	198,599
January 1	241	207,481
December 1, 1895	242	216,797
November 1	239	217,306
October 1	232	201,414
September 1	215	194,029
August 1	200	180,525
July 1	185	171,194
June 1	172	157,224
May 1	171	156,554
April 1	171	158,132
March 1	173	156,979
February 1	179	163,391

As compared with previous months the record of active charcoal and coke and anthracite furnaces stands as follows:

	—Charcoal— Fur'ces Capacity in blast.	per w'k.	Coke & Anthracite Number Capacity in blast.	per w'k.
November 1, 1897	19	4,656	164	208,503
October 1	20	4,636	151	195,492
September 1	21	4,555	140	180,951
August 1	20	4,003	132	161,375
July 1	14	2,894	131	161,170
June 1	15	3,321	131	165,059
May 1	13	3,729	133	166,799
April 1	16	5,368	147	167,911
March 1	18	5,425	138	164,561
February 1	18	5,144	136	157,815
January 1	19	5,456	135	154,264
December 1, 1896	19	5,182	128	137,096
November 1	21	5,083	112	119,094

The position of stocks, sold and unsold, as reported to us November 1, was as follows, the same furnaces being represented as in former months:

	June 1.	Aug. 1.	Oct. 1.	Nov. 1.
Stocks—				
Anthracite and coke..	886,318	756,955	649,301	615,407
Charcoal..	180,934	172,003	153,126	138,130
Totals.....	1,067,252	928,958	802,427	753,537

A BANQUET OF PAINT MEN.

THE Sherwin-Williams Paint Co. gave their seventeenth annual banquet to their employes at Army and Navy Hall last night. Covers were laid for 350 guests, among whom were 75 of their traveling salesmen and the managers of the New York, Chicago and Montreal branch houses. Johnson's orchestra and the Electric quartet furnished the music.

The tables were decorated with palms, chrysanthemums, roses and carnations, and the balcony draped with the Stars and Stripes and the Union Jack, the latter in honor of Mr. Cottingham, of Montreal. Mr. E. A. Wood, manager of the New York branch, acted as toastmaster, and the following toasts were responded to: "S. - W. Co. Salad, With Gentle Dressing." Mr. Frank Harris; "Our Absent Ones," Mr. Thomas Madill; "The Drummer or the Man Who Holds the Bag," Mr. John Williams; "The Ladies," Mr. Parsons; "Our Canadian Salesmen," Mr. Robert Johnson; "Our Methodical Methods," Mr. Moore; "Our Directors," Mr. A. M. Parks; recitation, "The Chameleon," Mr. T. H. Rothwell; "The Liars We Meet," Mr. F. B. Hare; "All the World's a Stage," Mr. Bradley; "Chips From Our Manufacturing Department," Mr. Critchley; "Our Railway Department," Mr. W. B. Albright; "Our Marine Department," Mr. E. M. Richardson; "Our 'L.D.' Department," Mr. C. F. Pratt; "The Chameleon," Mr. C. C. Ballantyne; "A Brief Look Backward," Mr. E. E. Lewis.—Cleveland Plain Dealer.

HOME AGAIN.

The Canadian salesmen of the Sherwin-Williams Co., all of whom attended the annual convention of the Sherwin-Williams Co. at the head works, Cleveland, Ohio, last week, returned to Montreal from their visit Saturday evening. They were all greatly impressed with what they saw at Cleveland, where they found the factories and different departments of this organization were beyond their expectations, which were by no means small.

The meetings lasted three days and was most instructive and interesting, covering every department of the business.

The social side was not neglected, and included a banquet of all the employes at the Cleveland Army and Navy Hall on the 10th, and a dinner to the salesmen at the Colonial Club on the 11th.

When the salesmen take the road again they will have some new goods and other matters of interest to present to their numerous customers throughout the United States and Canada.

MAKING PLATE GLASS.

A VISIT to a plate glass works reveals nothing more interesting than the casting tables on which the heavy plate glass used in most store windows is cast. "The casting tables," said the superintendent of a large New York plate glass factory to a Washington Star reporter recently, "are the most important pieces of apparatus in this establishment. Each table is about twenty feet long, fifteen feet wide and from seven to eight inches thick. The heavy strips of iron on either side of the tables afford a bearing for the rollers and determine the thickness or diameter of the glass to be cast.

"The rough plate is commonly nine-sixteenths of an inch thick, but after polishing it is reduced to six or seven-sixteenths. All casting tables are mounted on wheels which run on a track made to reach every furnace and annealing oven in the factory. The table having been wheeled as near as possible to the melting furnace, a pot of molten glass is lifted by means of a crane, and its contents poured quickly out on the table. A heavy iron roller then passes from end to end, spreading the glass to a uniform thickness. This rolling operation has to be done by expert hands quickly, as the boiling glass, when it comes in contact with the cold metal of the table, cools very rapidly. When the rolling process has been completed, the door of the annealing oven is opened and the plate of glass is introduced. The floor of the annealing oven is on the same level as the wheels of the casting table, so that the transfer can be made by rail quickly. When the glass is ready to be taken out of the oven its surface is very rough. In this condition it is used for skylights and other purposes where strength is desired rather than transparency. But when intended for windows it is ground, smoothed and polished, and is then ready for the market."

MONEY IN MANITOBA.

From the best information obtainable it is calculated that at least 12,000,000 bushels of wheat have been marketed to date this fall by the farmers of the province and Territories. This should mean that about \$9,000,000 has been placed in the hands of the wheat raisers in the Canadian west. The receipts at Fort William were 5,364,000 bushels during September and October, and the shipments during the same period were 4,306,000 bushels. This is the largest movement of wheat during those months to Fort William in the history of the Canadian Pacific line. The number of bushels of wheat in store at interior elevators is placed at 5,000,000.—Free Press, Winnipeg.

Another Year

On the 1st November we began our third year in Canada. Encouraged by the progress and the success accomplished in the first two years we go into the third with great enthusiasm, and a strong determination to follow up and increase the advantages gained.

Our activity and push will be more widespread and vigorous than ever. The demand for

THE SHERWIN-WILLIAMS PAINTS that has sprung up all over this country will gather strength and grow as the good qualities of the goods become known. Our paints are their own best advertisement.

Every dealer who handles our goods derives the benefit of our methods, and has in his power the means of largely increasing his paint trade.

We not only **get** business, but where there's none, we **make** it. Our efforts are to make people paint—with **good** paint. When times are good—**then** is the time to sell paint.

If you want to sell more paint we can help you.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

IRON ON LAKE ONTARIO'S SHORES.

Mr. Arthur McMillan, writing from the Toronto School of Science, refers to the discovery of iron ore in the sand at the lake front as follows:—"In reference to the discovery of magnetic iron ore at Oshawa, I have taken the trouble to look it up and find that it is not a new discovery at all. I quote you here from Prof. Chapmans Mineral and Geology of Ontario and Quebec, dated 1888. 'In the form of black sand, alone, or mixed with iserine, the ore occurs very commonly on the shores of Lake Superior, Lake Huron, Lake Erie and Lake Ontario and on those of many of our small lakes,' I spoke to Prof. Gilbrain about it. He said he thought every one in the land knew about it. He knew about it 20 years ago. Dr. Coleman and myself, along with six or seven students visited Scarboro Heights and there along the beach it occurs in much larger quantities than at Oshawa. Dr. Coleman said he knew of it 20 years. As to the theory of the deposit, it is quite simple. It is not strictly a glacial deposit as most of the older rocks contain this ore, especially the common variously colored garnet gneisses found in the shape of boulders all along the lake front. These rocks are, as time goes on, reduced to sand by water erosion. Thus

the magnetic ore on the lake front. The above is clearly shown at Scarboro where the garnet sands carry a large amount of magnetic iron."—Vindicator, Oshawa.

HOW TO SPOIL A KNIFE.

"There's a knife I bought in your store a while ago and the blades have given out," said a countryman in a large hardware store. "What is the matter with it?" asked the clerk, and the customer proceeded to relate how the "temper" had left the blades. He said he used his knife chiefly to cut plug tobacco and apples, and the confession led to a discussion of knives in general, during which the countryman was given the information that the acid in apples and plug tobacco would draw the "temper" out of the best knife ever made. "Very few people understand that fact," said the salesman, "but it is a fact just the same. A knife that is used to cut apples and tobacco will give out a great deal sooner than it would had it been used on the hardest wood. A great many people sharpen pencils with a knife and then kick when the blade becomes dull or nicks. The reason is that the lead is gritty, and when it shows its effect on the blade the complaint is made that the steel is either too hard or too soft."

LAMP REPAIRING.

A LAMP repairing department should prove a profitable investment to the hardware dealer who has the ever-prevalent desire to make every edge count. In conversation with a hardware dealer in the city the discussion turned upon the point whether or not it paid to have such a department, says Stoves and Hardware Reporter, St. Louis. "It seems," said he, "that many people are as afraid of a lamp when it starts to flickering strangely as they would be of a dynamite bomb. It is, of course, very natural that people should wish to be on the safe side and blow out the light as quickly as possible without serious consequences. What we refer to is the ignorance of many people in the care of lamps. For example, a gentleman brought back a lamp to us for repairs which we had sold him but a few weeks before. He said that it broke every chimney about the first time it was put on and lit; consequently, the lamp was in a fair way to 'break' him in necessitating the purchase of so many chimneys. He added that every precaution was taken in carefully lighting the lamp to see if this evil could be avoided, but nothing availed against this great defect. What do you think that lamp needed to make it all right? Simply to bend back the parts which hold the chimney; they clasped the flue a little too tight, and as a result it broke when it expanded with the heat. If lamps are systematically and properly cleaned and the wicks kept in good condition, they excel any other mode of lighting, especially for reading purposes."

RUMORED WIRE TRUST.

There have been reports recently that a movement is on foot to organize a wire trust,

to include practically all the companies in the country now making insulated wires and cables for electrical purposes. A similar report was circulated some time ago of a proposed trust of wire rod manufacturers, but on inquiry appeared to have but little foundation. Negotiations are now said to have been opened with fifteen or sixteen of the principal manufacturers of electric wire, and, it is claimed, efforts have been made to raise the necessary capital in England. The deal is as yet incomplete.—N. Y. Journal of Commerce.

THE SUPPLY OF ASBESTOS.

The French manufacturers of asbestos goods are supplied from four sources: 1. Canada, whence the asbestos is white, silky, very unctuous, having supple fibres from 5 to 25 mm. in length; of all varieties it is that which spins the most easily. 2. Siberia, whence the mineral is yellowish, some species being of a straw yellow. The fibre is less flexible, and more woody, but stronger than the Canadian, which it resembles in length; large masses of long-fibre mineral being, however, rarer. 3. The Cape of Good Hope asbestos has a characteristic blue color. It occurs in larger masses than either the Canadian or Russian, and its fibre is generally longer and stronger. In spinning or other manipulation, however, it is difficult to handle, a good deal of the fibre being reduced to powder. 4. In Italy there are different kinds of asbestos, but generally they are little adapted to spinning. There are some long silky fibres of little resistance, employed for gas furnaces; others are very short and fit only to make heat-retaining coverings.—Engineering.

SETTLING THE BOY'S CAREER.

An old Dutchman had a beautiful boy, of whom he was very proud, and he decided to find out the bent of his mind. He adopted a very novel method by which to test him. He slipped into the little fellow's room one morning and placed on his table a Bible, a bottle of whiskey and a silver dollar.

"Now," said he, "ven dot boy comes in, ef he dakes dot dollar, he's goin' to be a beesniz man; ef he dakes dot Bible, he'll be a breacher; ef he dakes dot whiskey, he's no goot—he's goin' to be a drunkart," and he hid behind the door to see which his son would choose.

In came the boy, whistling. He ran up to the table and picked up the dollar and put it in his pocket; he picked up the Bible and put it under his arm; then he snatched up the bottle of whiskey and took two or three drinks and went out smacking his lips. The old Dutchman poked his head out from behind the door and exclaimed:

"Mein gracious! he's goin' to be a politician."—Tit-Bits.

CITY HALL ELEVATORS.

The Toronto Board of Control on Thursday last week awarded the contract for the elevators in the new City Hall to the Sprague Elevator Co., of New York, who tendered to put in five electric elevators for \$29,875. At a meeting of the City Council on Monday the report of the Board of Control came before the Council, when the decision of the board was reversed, and the report was referred to the Property Committee, after being amended to allow that committee to prepare new specifications for cars, elevators and enclosures, either separately or together.

THE "IDEAL" SMOKELESS POWDERS

FOR GAME AND TRAP SHOOTING.

"SHOT-GUN RIFLEITE"

I. B. S. A. CHAMPIONSHIP MEETING

Wembley Park, June 8 to 12, 1897.

LEADING PRIZES won with "SHOT-GUN RIFLEITE," including the

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THE NOVICES' and VETERANS' PRIZE,**
Value £15.

THE RIFLEITE CUP

Fell to Mr. D. O'Connor after 45 BREAKS WITHOUT A MISS. Strong testimony in favor of the excellence of this Powder.

Lord Ashburton on "Shot-Gun Rifleite."

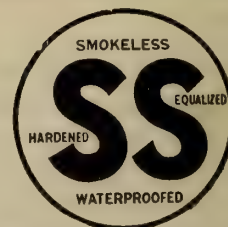
Extract from Letter to Editor of The Field:
See Field, May 15th, 1897.

"I used this powder (Shot-Gun Rifleite) all last season and thought it wonderfully good, both in its hard-hitting qualities and regularity. Out of many thousand Cartridges I never found any symptoms either of weakness or undue strength; and I have recently used the same powder in Egypt and the Malay Peninsula, and found that the great heat in those parts in no way affected it." (Signed) ASHBURTON.
9th May, 1897. 42 Grosvenor Square, W.

MR. HENRY SHARP

The well-known expert on Wild Fowl Shooting, writing to The Field, says:

"Shot-Gun Rifleite is a powder that is known to be very quick in the barrel and to give very high velocities afterwards."



NEW ISSUE, 1897—S.S. has been greatly improved this year. The 1897 issue is a distinct advance on all previous issues, and will hold its own with the best nitros now on the market. TRY IT AND SEE.



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Graham Cut and Wire Nails are the best.

THE CHAINLESS BICYCLE.

IN the new chainless bicycle which has just been brought out there is no radical departure from the chain wheels of 1897 or the bevel-gear wheels shown during the last year. The wheels, the frame, the saddle, the handle-bars and the pedals, explains a contemporary, are practically the same as were used for this year's chain bicycles. The chain is gone, and its disappearance involves a slight rearrangement of the tubing running on the right-hand side of the frame from the crank hanger to the rear bearing. The new wheel shows a semi-circular bit of tubing where this tube connects with the rear fork, a latch arrangement shutting in the rear axle and some bulbous coverings for the cog wheels. The sprocket wheel on the crank axle has also disappeared from sight, but behind a shining plate covering the working parts is a cog wheel of about the same size as the large sprocket wheel on the older type of machine. When one comes to consider the smaller details of the machine he will find several important changes. One is in the cranks. One crank is made as part of the crank axle, while the one on the left side is made as a separate piece and secured to the axle by a cotter pin. Another change which is not apparent to the eye, but is considered to have been forced by the need of greater stiffness in the frame, is that the two tubes forming the rear forks are of thicker metal, and at their upper ends under the saddle are built fast to the frame by forgings and brazing instead of being merely bolted on. In some other parts the frame has been made slightly heavier also, and these changes, with the addition of the weight in the cog wheels and their covers and connections, above that of the sprockets and chain make the new wheel about a pound heavier than the standard wheel of this year.

The working parts of the new wheel consist of four cog wheels, each with teeth on a bevel, and involve the addition of two ball-bearings journals in addition to those on the older chain wheels. The first of these cog wheels is a large one fastened upon the crank shaft almost at the same place where the big sprocket wheel used to be. The crank shaft runs, as of old, in two ball bearings. The second cog wheel of the series gears into this big wheel, and is secured to the end of a solid steel shaft which runs through the side tube back to the rear wheel hub. The third cog wheel is secured to the other end of this shaft. Back of each of these cog wheels at either end of the tube are the two new ball bearings. The fourth cog wheel is secured to the right-hand end of the hub of the rear wheel, just like the rear

sprocket, which it replaces. The rear wheel still has its two ball bearings upon its axle. The semi-circular list of tubing already mentioned bends around the line of the fourth-cog wheel, and passes back of the rear bearing of the shaft, which carries the intermediary cog, thus leaving no direct means of securing the axle of the rear wheel on that side to the forks, and to provide for this a latch is made, which has a socket for the rear axle at its centre. This is bolted to the ends of the semi-circular tube. After all the working parts are in place and adjusted, a plate which fits over the large sprocket wheel is put into place in the face of a cup-shaped forging which covers the back of that wheel and the connection with the second cog wheel, two odd-shaped forgings, are bolted into place so that they cover the two rear cog wheels, and the working parts are out of sight and secure from dust. Where the moving parts meet these shields felt washers are provided to exclude dust, and the covers are said to be so tight that they will retain oil, and all the working parts may be kept in lubricating oil.

CASTINGS FOR CYCLES.

The knowledge of steel and other products and alloys of iron is progressing at a very rapid rate, but the greater part of the new knowledge remains confined within the large steel-making and steel-working establishments, where experiments are being systematically carried on. Only by slow degrees does the trade or public in general absorb new ideas on the subject. If, a few years ago, it had been proclaimed to the cycle trade that cold, open-hearth steel would flow almost like water under pressure of dies, if only the pressure was strong enough and slow enough, the proposition would have been considered preposterous by all but experienced die workers, who knew of it by practical experience. Yet this idea has become general property among all who make steel stampings, and is slowly being grasped by the public. In a similar manner there is gradually cropping out a modification of previously existing notions in regard to steel castings; many products sent out by manufacturers have been considered brittle, porous, and not suited for tensile or transverse stresses; but it is being maintained very stoutly by steel foundry men that that is a past stage. When particular attention is given, these castings may be rendered tough, by a proper system of annealing. While it is admitted that the chemical composition of steel has very much to do with the virtues or defects of the finished casting, the advantages of an annealing process, and further manipulation which lasts several days, are claimed as the one feature which is common for all castings that should be at all considered for cycle construction.—Cycling Life.

CHIMING BELLS ON BICYCLES.

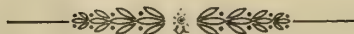
A COUPLE of dozen young ladies and gentlemen of Galveston are responsible for a most unique idea in bicycling. Just who thought out the scheme is not known, for the credit is generally shared. The company is termed the "bike bell ringers," and it sprang into existence after the passage of the ordinance requiring wheelers to carry lamps and to ring bells at all street crossings. These bikers have fitted their wheels with lamps of different hues and with bells of different tones. The idea is to comply strictly with the law and at the same time to have a little theatrical effect. The object of the law being to have wheelmen give notice of their coming, that object will certainly be attained in the case of the "bike bell ringers," for their approach is made known by the ringing out of sweet music. They have been practising on the shell road out near the country bridge, and thus far have given no exhibitions in town. A News man who had occasion to go to the western part of the city last night was fortunate enough to meet the "bike bell ringers" on dress parade. Afar down the road came the silent steeds with ever-changing lights. First a group of red lights headed the procession, then came a group of red, white and blue, then a group of green lights, flanked by red and blue. And so the wheels and lights were constantly changing, making beautiful effects. As the wheels drew nearer the chiming of the bells could be heard. First a few bars were played from "The Chimes of Normandy;" then came "Annie Laurie," the "Tinkle, Tinkle, Belis" song from "Olivette," and as the bikers passed on and were lost in the distance the notes of "Home, Sweet Home," were heard.

The idea is a pretty one, and if adopted by others the bikers will be welcomed on the streets for the harmony of sounds they bring in lieu of harsh and indiscriminate clanging. —Galveston News.

A NON-SPLITABLE BICYCLE RIM.

Among recent patents is a non-splitable bicycle wheel rim, which presents some novel features. The rim is extremely simple, consisting of three layers of strong wood, such as spruce, elm or ash, the grain of all three running circumferentially. The middle layer is veneered on both sides with a thin layer of wood, preferably walnut, the grain of both layers running directly at right angles to that of the basic woods. The rim is put into a form, glued and turned down, the walnut veneers producing two parallel bands on each side of the rim, which gives it an ornamental appearance without painting or striping. It is said to be impossible to split this rim, which has been submitted to the severest tests.

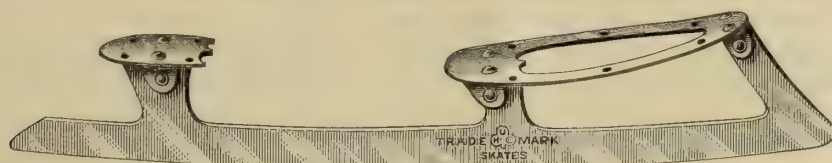
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These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



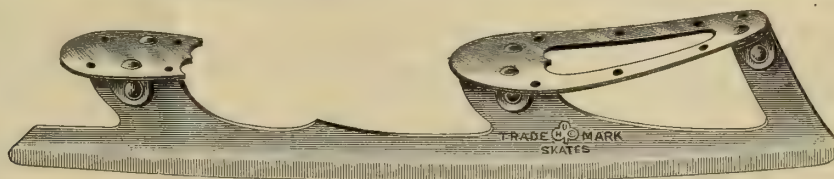
Plain Runner, Straight.



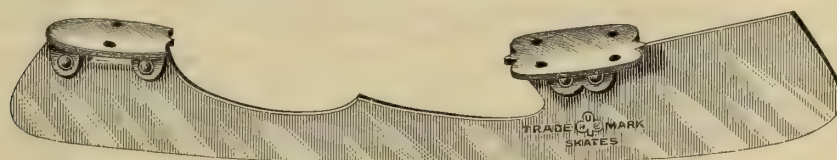
Plain Runner, Curved Blade.



Ribbed Runner.

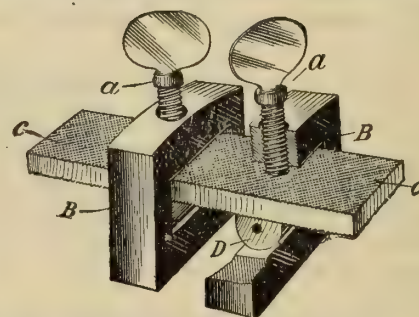


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



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A TREATY WITH THE STATES?

THE value to Canada of a reciprocity treaty with the United States is not nearly as great as it was even five years ago.

Up to the time of the going into operation of the McKinley Tariff a good many people in Canada thought that with the higher tariff ruling against goods which the Dominion exported largely to the United States the country had received a blow commercially which threatened to produce dire consequences.

Everybody knows that the blow neither killed nor "nearly killed father." The worst it did was to compel us to seek markets elsewhere. And, what is more, we sought and found, with the result that our exports to all countries of goods the product of Canada were in 1896 over 30 per cent. larger than in 1890, when the McKinley Tariff went into force. Canadians will, therefore, always look back upon the McKinley Tariff as a sort of blessing in disguise.

Of course in the matter of breadstuffs the British market is more to us than the United States market ever can be. Great Britain, for instance, last year took \$5,677,637 worth against \$40,424 worth by the United States. In oats and peas the greater quantity also went to Great Britain. In barley, of course, we were all undone by the McKinley Tariff. We did try what we could do with Great Britain in this particular cereal, but, partly due to our own carelessness, our efforts were futile. And in spite of the almost prohibitive tariff, the United States is still our largest customer for barley, last year taking \$297,438 worth against \$15,483 worth by Great Britain. How enormous has been the decline in the exports of barley to the United States may be gathered from the fact that in 1890, the year the McKinley Tariff went into force, we shipped to that country \$4,582,562 worth, while in one year the figures reach \$7,000,000. Of flour

we sent but \$10,428 worth to the United States compared with \$347,685 worth to Great Britain.

In horses, cattle, sheep and swine, the British market is incomparably better for us, our exports to Great Britain in any one of the class of animals enumerated exceeding those of the others to the United States put together. Of horses, cattle, sheep and swine, all told, Canada did not last year export one million dollars' worth to the United States, while to Great Britain we sent over 10¼ million dollars' worth.

Exports of canned meats and all other meats also go nearly altogether to the Mother Country. It is the same with butter, while of course with cheese there is practically no comparison, Great Britain taking nearly fourteen million dollars' worth in 1896 against \$10,359 worth by the United States. Our chief market for apples, dried or green, is also in Great Britain.

In manufactured goods the exports of the Dominion to the two countries are about equal.

As a market for fresh fish the advantage of course is with the United States, but the quantity of canned salmon and lobster we export to Great Britain is so much larger that the total value last year of the exports of the product of the fisheries was \$4,462,002 to the latter and \$3,301,671 to the former country. It may be noted that in 1890 the quantity we exported to Great Britain was valued at \$2,707,422 and to the United States at \$2,850,528.

Next to animals and their products, the most important class of our exports is that known as products of the forest. Here the difference between the quantities taken by the two countries is not great, Great Britain in 1896 taking \$12,186,806 worth and the United States \$13,528,047. In 1890 the figures were \$14,098,865 and \$10,247,640 respectively.

As to minerals, the market for them, at present at any rate, is decidedly the

United States, our exports in 1896 being \$175,512 worth to Great Britain and \$7,437,814 worth to the United States. Of the latter total nearly three million dollars' worth was coal.

On all the articles we now export chiefly to the United States the Dingley Tariff imposes higher duties, and it is, of course, in regard to these lines that Canadians are most concerned. Naturally there is some concern in regard to animals and their products and agricultural products, but as we send of the one \$32,523,071 worth to Great Britain against \$3,341,275 worth to the United States, and of the other \$9,551,316 to Great Britain and \$3,232,793 worth to the United States, it is evident we have not so much to fear from hostile tariffs. We are beginning to realize that in these particulars they have about done their worst.

It is evident, therefore, that Canada is more interested in getting a freer market in the United States for coal, lumber, fish and barley than anything else, although its extension to animals and their produce and agricultural produce generally would by all means be welcome. It is worthy of note that The Toronto Globe on Monday authoritatively stated that the conference would discuss the abolition by the two countries of the duty on coal, lumber, barley, eggs, fish, potatoes and hay.

But it is one thing to want and another thing to get what we want. Canada has importuned the United States until she is no longer in the spirit to importune. We are told that the present tete-a-tete at Washington is the result of an agreement arrived at in London last summer between Lord Salisbury, Sir Wilfrid Laurier and Gen. Foster, the American Seal Commissioner. **HARDWARE AND METAL** hopes it is.

But whoever made the advances, it is to be hoped that some sort of a reciprocity treaty will be secured, although it must not compromise us in the position we have taken in regard to Great Britain. Frankly we have little faith in the consummation of

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a treaty at present. The McKinley Administration may be favorable, but it is questionable whether the Senate will be. If that body has outlived its prejudice in regard to Canada we shall be only too glad to learn it. But Canadians generally are just now doubting Thomases.

With blood the same, language the same, Canada and the United States should not only be on friendlier terms than they now are, but they should also deal more freely with each other.

A HARDWAREMAN IN POLITICS.

MR. GEORGE H. BERTRAM, the Liberal candidate in Centre Toronto, is president of the Bertram Engine and Shipbuilding Co., Limited, and a hardwareman of many years experience. He was born in Haddingtonshire, Scotland, about twenty miles from Edinburgh, and left the farm to serve his apprenticeship to the hardware business in "Auld Reekie." Shortly afterward he left Scotland to join his elder brother, Mr. John Bertram, in Lindsay, Ont. That was in 1865, and immediately on his arrival in Canada Mr. Bertram entered into partnership with his brother in the hardware trade. At that time much lumber was being cut in the district, and the business of the Bertram Bros. prospered and became widely known for cautious management and strict integrity. In 1881, after 16 years in Lindsay, the firm moved to Toronto and went more extensively into the wholesale trade. When the Doty Engine Works failed in 1892 a large amount was owing by them to the Bertrams, and the latter decided to take over the business and make it pay if possible. The energy and business skill which had made a success in the wholesale trade produced like results in manufacturing. The Bertram Engine and Shipbuilding Co. is one of the big industrial concerns of the province. In view of the development of the works of which he is president, Mr. George Bertram recently retired from the hardware department, which is now managed by a firm in which his son is the senior partner, as **HARDWARE AND METAL** noticed a few weeks ago.

Steel shipbuilding in Toronto has become an important industry as a result of Mr. Bertram's efforts in that direction. Among the vessels built have been the Corona, of the Niagara Line; the Madora, now plying on the Muskoka lakes; the Keenora, plying from Rat Portage to points on the Lake of the Woods; four steamers for the Upper Ottawa Improvement Co; four large grain barges for the Prescott Elevator Co. Among the vessels now under contract are four additional barges for the Prescott company and a magnificent vessel of the Corona type for

the Richelieu and Ontario Navigation Co., to be followed by another of the same type. The pay roll of the engine works is something in the neighborhood of \$100,000 yearly.

WESTERN FIRMS AMALGAMATE.

Thos. Marks & Co., Geo. Clavet and Dobie & Co., all carrying on business separate at Port Arthur, Ont., until recently, have formed a joint stock company under the name of the Marks, Clavet, Dobie Co., Limited, and in future will conduct a wholesale and retail hardware and grocery business, and in order to secure a fair share of the trade of the great mining district of Northern Algoma have placed a traveler on the road who will look after the company's interest from White River to Rat Portage.

If business experience counts for anything the new firm should be successful, as Mr. Marks, the president, has been in business 40 years; Mr. Clavet, the managing director 25 years; Mr. J. C. Dobie, the junior member, has conducted a successful business for a number of years, and Mr. Hourigan, the secretary and accountant, has been in the employ of the Ontario Bank for 11 years.

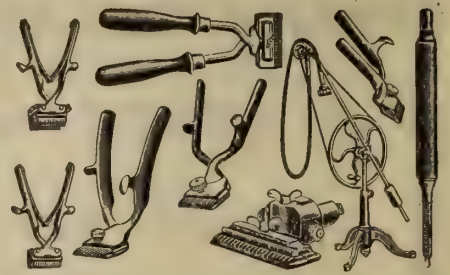
Last week **HARDWARE AND METAL** called on the new firm, and, in conversation with the managing director, learned that it was their intention to buy in large quantities from manufacturers, etc., and to buy for cash only.

MUCH STRONGER THAN STEEL.

It is stated that after some years of study a special agent of the United States Department of Labor has perfected a new material that is lighter and stronger than steel. The material is manufactured from the fibre of Calcutta bamboo, and the process of manufacture is a secret, as the patent is pending. It is claimed for the new material that it is four times stronger than the best steel tubing used for the manufacture of bicycle frames. A sledge-hammer blow will not affect it in the least, and it will stand much harder tests than steel tubing. It is lighter by a pound and a half than steel, and will save a pound and a half in weight in the construction of bicycle frames. In addition to this it is said that the cost is much less than the best quality of tubing. It is also impervious to water and unaffected by heat or cold.—Philadelphia Record.

A HEAVY PEDLARS' TAX.

Moncton, N.B., has adopted a by-law taxing pedlars \$8 per day, \$15 per week, \$45 per month or \$80 a year. This does not apply to commercial travelers representing manufacturers or wholesale merchants selling to the retail trade.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

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Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

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List of agencies now held.

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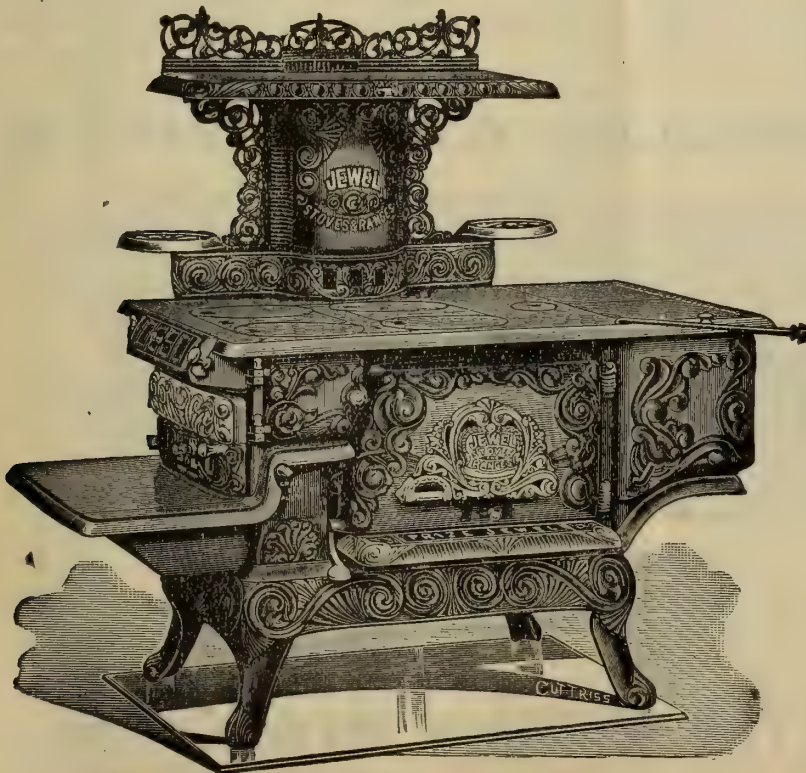
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which is smaller than the Empire, but of similar construction, and a splendid worker.

THE . . .

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Our line of **STEEL RANGES** in many varieties is worth examination.

BURROW, STEWART & MILNE

Manufacturers

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MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Nov. 19, 1897.

HARDWARE.

DESPITE the fact that winter freights went into effect on Monday last on both railways the week has not been devoid of activity, as shippers have been pushing forward orders to points that can be reached by water, which gives them another week's grace, as the water will not be let out of the canal until the close of the week. Values all round are steady and there have been few new features to report in any line. Plain and barbed wire continue dull as last reported, and though the actual movement in wire nails, bolts, nuts, rivets, and other small wares and shelf goods is less than it was last, enquiry has still been noticeable for all.

BARBED WIRE—Enquiry for forward delivery continues as noted last week, but there is nothing doing in an actual way. The basis is unchanged at \$2.35 f. o. b. Montreal.

PLAIN WIRE—Trade in plain fencing wire is quiet also, but enquiry for hay baling wire is reported. Discounts are unchanged at 30 and 10 off.

WIRE NAILS—The brisk enquiry for wire nails was maintained until a day or so ago, but since Monday the actual movement is lighter. We quote prices unchanged at \$1.90 f. o. b. Montreal.

CUT NAILS—There has been a quiet trade in these until the beginning of the present week. We quote the base price, as before, \$1.85 f. o. b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Trade in these is quieter, as in other lines. Discount, 50 per cent.

HORSESHOES—Demand for these is fair, but the actual movement is lighter than it was last week. We quote as follows: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Business in these was fairly active up to Monday last. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Quiet and unchanged. Discount, 12½ per cent.

BOLTS—There has been a fair enquiry for these, but the actual movement is smaller than it was last week. Discounts are as follows: Carriage bolts, ¼ and 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—The same remarks apply to these. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

SPADES AND SHOVELS—There has been a fair enquiry for these, discounts being unchanged.

FILES—Business in these is less active. We quote: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There is a fair enquiry for sisal rope. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—Quiet and steady with Royal Canadian quoted at \$29.

BUILDING PAPER—There has been a fair demand for building paper, but the movement has diminished. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.40.

HOLLOW WARE—Nothing special to report this week.

HINGES—Quiet as last reported. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—Both table and pocket cutlery have been well enquired for.

SPORTING GOODS—Business in these has been of rather smaller volume, but the enquiry is still far from being active. Both ammunition and firearms are asked for.

SHOT—Steady. We quote: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Demand for cement continues active, and orders are being rushed forward by water as fast as shippers can have orders executed. Stocks on spot this fall are much lighter than usual. We quote: English, \$2.10 to \$2.20, and Belgian, \$1.85 to \$1.90.

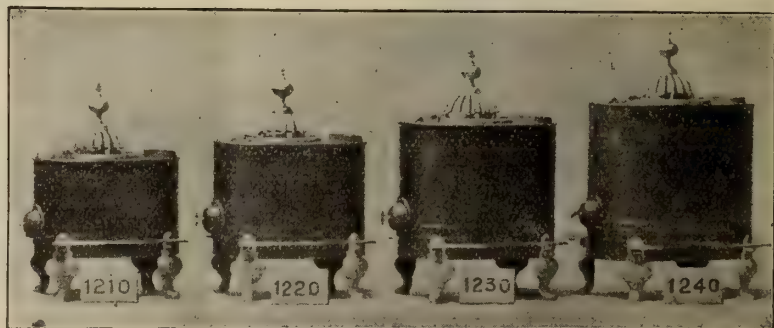
FIREBRICKS—In fair enquiry and steady at \$16 to \$21 per 1,000 as to brand.

METALS.

The metal market has ruled fairly active during the week, and prices all round are firmly maintained.

PIG IRON—An active trade has been done in pig iron, some large lots of Scotch iron being moved ex wharf on the basis of \$17.50, while several carloads of No. 1 Hamilton pig iron were placed toward the close of last week at firm prices. We quote:

FAMOUS AIR TIGHTS



FOUR SIZES. Planished or Russian Iron Body.

Take 21, 22, 23 and 24 in. wood respectively. Cast Top, with large wood opening and nickel-plated fancy swing cover and urn. Front Screw Draft. Loose parts packed inside for shipping. Every stove papered and crated.

... Manufactured by ...

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG AND VANCOUVER

Henry Wright & Co.'s ANVILS and VICES

ARE

RIGHT in quality
in pattern
in price

STOCK CARRIED IN MONTREAL.

A. C. LESLIE & CO.
Montreal

Iron, Steel and Metal Merchants.

Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

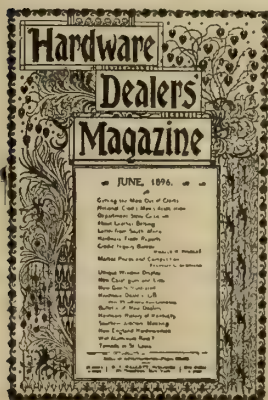
31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.



**ONE
DOLLAR
A
YEAR**

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Sample
Copy
Free

★
D. T. Mallett
Publisher
271 Broadway
New York

No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—There has been a fair movement of bar iron via canal, and prices are firmly held at \$1.45 to \$1.55, with carload lots 10c. less.

BAND IRON—The same can be said of band iron for which demand has been fair the base price being 30c. advance on the bar iron figures.

HOOP IRON—Fairly good enquiry noted with prices unchanged at \$2.25.

SHEET IRON—Enquiry for some of the heavier gauges was quite noticeable. The base price is as last quoted, \$2.25.

SHEET STEEL—The same remarks apply to sheet steel which is quoted steady on the basis of \$2.35.

GALVANIZED IRON—The demand for galvanized iron has been fair and prices steady. Stocks here are well assorted, whatever they may be in the west. We quote \$4 to \$4.15 for 28-gauge Queen's Head case lots.

TINNED IRON—As last reported on the basis of 5½c. for 6 x 30 No. 24; other sizes and gauges, the usual extras.

LEAD PIPE—Business in lead pipe has ruled quite while prices are unchanged at 7c. for lead and 7½c. for composition waste, with a discount of 27½ per cent.

PIG LEAD—Steady, with values firmly held at \$3.85.

INGOT TIN—There has been little change to report in pig tin, prices ruling steady at 16c.

INGOT COPPER—Quiet and steady despite irregularity outside at 12 to 12½c.

SHEET COPPER—There is a quite steady trade doing. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—Stocks of these are well assorted, and the distribution with jobbers is better than in former years. Values are steady at \$2.10 to \$2.25.

TIN PLATE—Trade in these has been quite satisfactory. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., 3.80; do, I. X., \$4.80.

TERNE PLATES—Prices rule firm with a moderate enquiry on the basis of \$6.

COIL CHAIN—There has been a good enquiry for this article at \$2.85 for 5½ up.

SHEET ZINC—There is a fair trade at 5 to 5½c.

SOLDER—As last reported at 11½c.

SPELTER—Quiet, with round lots shaded during the week, and we quote: \$4.50 to \$4.70.

ANTIMONY—Unchanged, at 9½ to 10c.

Cattle Chains

The superiority of Greening's consists in their being of uniform strength in all their parts. Simplicity of the attachments and best quality of material and workmanship.

The B. Greening Wire Co., Limited
HAMILTON, CAN.

Abbott & Co.

FACTORIES

—MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moc-casins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

IRON PIPE—There has been a good movement in this article. We quote: Black pipe, $\frac{1}{4}$ -inch, \$2.05; $\frac{3}{8}$ -inch, \$2.05; $\frac{1}{2}$ -inch, \$2.45; $\frac{3}{4}$ -inch, \$2.90; 1-inch, \$4.20; $1\frac{1}{4}$ -inch, \$5.35; $1\frac{1}{2}$ -inch, \$6.90; 2-inch, \$9.35; and $2\frac{1}{2}$ -inch, \$13.60. Galvanized pipe, $\frac{1}{2}$ -inch, \$4.25; $\frac{3}{4}$ -inch, \$5.25; 1-inch, \$7.25; $1\frac{1}{4}$ -inch, \$10; $1\frac{1}{2}$ -inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—Unchanged, at \$13.50 to \$14.

GLASS.

The glass market ruled active until the beginning of the week, and now the movement by water inland is quite brisk. We quote: First break, \$1.30 in 50-foot boxes, and \$2.55 in 100-foot boxes.

PAINTS AND OILS.

With the advent of winter freight rates, which took effect on Monday last, the fall trade in this department may be taken as closed, though some sorting shipments will continue to be made by east and west-going boats for the balance of the present week. There is no change in prices to record, and we repeat the figures of last week as follows:

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, $4\frac{1}{2}$ c.; kegs, $4\frac{3}{4}$ c.; No. 1, casks, $4\frac{1}{4}$ c.; kegs, $4\frac{1}{2}$ c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to $10\frac{1}{2}$ c. in cases, and $9\frac{3}{4}$ to $10\frac{1}{4}$ c. in barrels.

SEAL OIL—30c. for brown, and $37\frac{1}{2}$ c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, $4\frac{1}{2}$ to $5\frac{1}{2}$ c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

The enquiry for this on city account has increased and prices are steady. Canadian is unchanged at the decline, 14c. in car lots and 15c. in small quantities, and American $16\frac{1}{2}$ c. in car lots and $17\frac{1}{2}$ c. in small lots.

COAL.

Quiet and steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

The beef hide market has been excited here during the week, owing to the competition between two cliques of buyers. As a result from $6\frac{1}{2}$ to $8\frac{1}{2}$ c. has been paid

according to grade. Lambskins are steady at 75 to 80c. each.

ASHES.

Unchanged as last quoted: First pots, \$3.55 to \$3.65; seconds, \$3.25; and pearls nominal.

MONTREAL NOTES.

Winter freights went into force on Monday of this week.

Shippers are busy this week rushing forward goods to points that can be reached by water. It is expected that the canals will close at the end of this week.

ONTARIO MARKETS.

TORONTO, Nov. 19, 1897.

HARDWARE.

BUSINESS is being well maintained. For such lines as stoves, stove boards, coal hods, elbows, snow shovels, etc., there is an active demand. The demand for sporting goods has, on the other hand, fallen off materially. There is also less doing in ordinary fence wire and hay-baling wire. Business is still good in wire nails, and in cut nails a slightly improved demand is to be noted. A material improvement has taken place in the demand for horse shoes. A good business is being done in screws, bolts, and rivets and burrs. Churns are about 14 per cent. higher and the demand has improved.

BARB WIRE—Nothing doing. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE, ETC.—The demand has again fallen off, both for ordinary fence wire and hay-baling wire. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—Trade has been fair, coppered iron and coppered spring wire being mostly called for. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—The improvement in the demand noted last week appears to have continued. As no change was made in the commodity rates on nails no change in price has taken place. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points other than those named the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—Orders have been a little better this week, although the volume of business is still light. We quote: Base

price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Trade has been better this week. There is, however, a scarcity in all lines. Discount 50 per cent.

HORSESHOES—The demand has increased materially this week, but it is nearly altogether for the iron kind. We quote: \$3.25 f.o.b., Montreal.

SCREWS—A number of good orders have been received during the week. Discounts are as follows: Flat head bright, $87\frac{1}{2}$ and 10; round head bright, 80 and 10; flat head brass, $82\frac{1}{2}$ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, $87\frac{1}{2}$ and 10 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, $12\frac{1}{2}$ per cent.

BOLTS—Orders are of fair dimensions. Discounts are: Common carriage bolts, 3-16, $\frac{1}{4}$, and 5-16, 70 per cent.; do., $\frac{3}{8}$ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, $4\frac{3}{4}$ c., off the list; hexagon, $5\frac{1}{4}$ c., off the list.

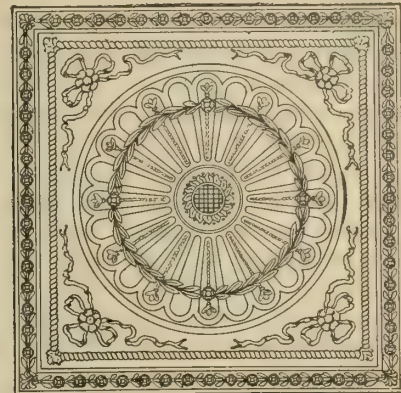
RIVETS AND BURRS—While trade is not as brisk as it was, still quite a number of orders are being received. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—The demand is nearly altogether for the smaller sizes, and it is fair. We quote: Sisal, 7-16 in. and larger, $6\frac{1}{4}$ c.; $\frac{3}{8}$ in., $6\frac{3}{4}$ c.; $\frac{1}{4}$ and 5-16 in., $7\frac{1}{4}$ c.; 3-16 in., $7\frac{3}{4}$ c. Manilla, 7-16 in. and larger, $7\frac{1}{4}$ c.; $\frac{3}{8}$ in., $7\frac{3}{4}$ c.; $\frac{1}{4}$ and 5-16 in., $8\frac{1}{4}$ c.; 3-16 in., $8\frac{3}{4}$ c.; deep sea line, $13\frac{1}{2}$ c. for water laid, and $14\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—There has been a change in prices, the discount now being 60, 10 and 5 per cent. instead of 70 per cent. as formerly. This is an increase of about 14 per cent. The delivery points are Toronto, Hamilton, London and St. Marys. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—A slight improvement is to be noted in the demand. We

EMBOSSSED STEEL CEILING



OUR CEILINGS are all well and evenly coated on both sides with the **Best of Pure White Zinc**, mixed with **Pure Linseed Oil and Turpentine**, which thoroughly protects the metal, and when up they may be painted in any manner desired, from an ordinary "flat" finish in one or two tints, to the more elaborate decorative finish of "wiping" each plate in a number of tints, and touching up the raised parts with Bronze or Gold Leaf. There is practically no limit to the decoration that can be put on our Goods, the Embossing and Design giving the decorator unlimited scope for his abilities.

Beware of inferior imitations. We shall be pleased to send you our catalogue and to submit designs and estimates.

YOU SHOULD HANDLE THESE GOODS.

METALLIC ROOFING CO. Limited

TORONTO

THE PIONEERS AND MOST EXTENSIVE MAKERS OF SHEET METAL BUILDING MATERIAL.

quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS, ETC.—Trade has improved materially in spades and shovels, and draining tools are also going out more freely. Discount on spades and shovels, 45 and 2½ per cent.

FALL SPECIALTIES—There are practically no furnace scoops to be had. Elbows, stove boards, coal hods, axes, rope halters, cross-cut saws, skates and skate supplies, etc., are all in good demand.

SPORTING GOODS—Trade has fallen off materially since last week, although there is still a fair quantity of ammunition going out.

AGRICULTURAL TOOLS—Not much doing. The demand is chiefly for manure forks, vegetable scoops and hay knives.

SNOW SHOVELS—These are going out freely, and the enquiry is nearly altogether for the steel kind. We quote \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—The scarcity has been overcome somewhat; shipments of any quantity now being more readily made. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.;

"Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—While trade is not active, quite a number of orders are being received for the better grades. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

CUTLERY—Quite a number of case carvers are moving, and a brisk demand is reported for pocket cutlery.

HINGES—Trade is moderate. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—Trade is moving quite freely, with prices unaltered. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.40; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

SKATES—Are going out freely. There is a scarcity in some lines of German skates, owing to delay on the part of manufacturers in making shipments. Canada plates are dearer.

METALS.

PIG IRON—There is no change to note. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—There is not a great deal doing, although the orders have been a little better than last week. In sleigh shoe and tire steel an improved demand is to be noted. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—While trade has fallen off, there is still a fair business doing. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—There has been a fair amount of business doing and prices remain firm. The demand is about equally divided between the No. 1 and No. 2 qualities. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Business continues fairly good. We quote as follows: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade is still brisk, but dealers have not experienced the same difficulty in supplying the demand. At the same time stocks of "Queen's Head" are

exceptionally low. Stocks of "Gordon Crown" are also running short. In American eight-foot iron there is still a scarcity to be noted in the lighter gauges. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{3}{8}$ c.; 18 to 24, $\$3.87\frac{1}{2}$ c.; 26, $4\frac{1}{8}$ c.; W. G. 28 gauge, $\$4.37\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, $\$3.80$; 26 gauge, $\$3.55$; 22-24 gauge, $\$3.30$; 18 to 20 gauge, $\$3.05$. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Trade is moderate. We quote: $3\frac{3}{8}$ and larger, $\$1.75$ per 100 lbs.

TINNED IRON—Quiet: We quote: Up to 20 gauge, $\$5.50$ per 100 lbs.; 22 to 24 gauge, $\$6.00$; 26 gauge, $\$6.50$; 28 gauge, $\$7$; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{1}{2}$ to $7\frac{3}{8}$ c. per lb.

LEAD PIPE AND TRAPS—Trade is not as good as it was, orders being for smaller quantities. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, $27\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on $\$10$ lots, and 25, 10 and 5 per cent. on $\$25$ lots and over.

PIG LEAD, ETC.—Trade remains steady. We quote pig lead at 4 to $4\frac{1}{2}$ c., and bar, at $4\frac{1}{2}$ c.

SHOT—Trade is moderate. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, $12\frac{1}{2}$ per cent.

INGOT TIN—Trade fair, although shipments are inclined to be on the smaller side. We quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb.

INGOT COPPER—Continues quiet. Prices are unchanged at 12 to $12\frac{1}{2}$ c. per lb.

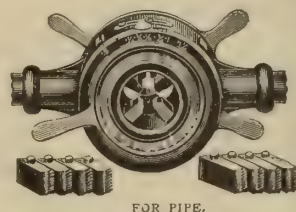
SHEATHING COPPER, ETC.—Orders have been coming in a little better, especially for braziers'. The demand for sheathing and roofing copper has been only fair. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c. according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Trade has been a great deal better and stocks in certain sizes are exceedingly low. We quote as follows: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, $\$2$; $\frac{1}{2}$ inch, $\$2.35$; $\frac{3}{4}$ inch, $\$2.87$; 1 inch, $\$3.87$, $1\frac{1}{4}$ inch, $\$5.10$; $1\frac{1}{2}$ inch, $\$6.38$; 2 inch, $\$9.25$ per 100 feet; galvanized, $\frac{1}{2}$ inch, $\$4$ to $\$4.25$; $\frac{3}{4}$ inch, $\$4.80$ to $\$5$; 1 inch, $\$6.75$ to $\$7$; $1\frac{1}{4}$ inch, $\$9.25$ to $\$9.62\frac{1}{2}$; $1\frac{1}{2}$ inch, $\$11.75$ to $\$12.25$ per 100 feet.

SOIL PIPE—Trade is quiet. Discount, 60 and 10 per cent.

RANGE BOILERS—Trade is moderate. We quote: Galvanized, 30 gals., $\$5.25$ to $\$5.50$; 35 gal., $\$6.25$; 40 gal., $\$7.50$; copper, 30 gal., $\$22$; 35 gal., $\$26$; 40 gal., $\$30$; discount off copper boilers, 25 per cent.

STANDARD of
AMERICA
for
30 Years



FOR PIPE.

NICHOLSON
FILES

NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World

In Stocks and Dies
there is no better than

HART'S DUPLEX
ADJUSTABLE.

Write for Lists and Discounts
The Hart Mfg. Co.

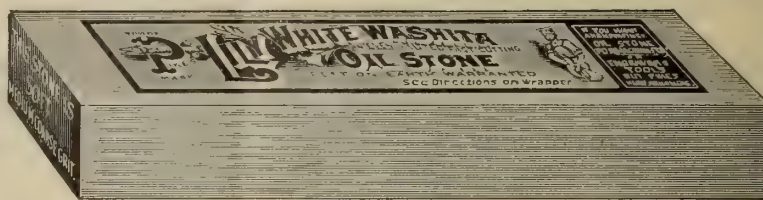
20 Wood St., Cleveland, O., U. S. A.



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guaranteed
to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the 38-40 and 44-40 cartridges, but also the 25-20 and 32-20.

1894



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to . . .

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

CANADA PLATES—Shipments are going out freely and prices are higher. We quote: Half-polished, 52-sheet boxes, $\$2.35$; ditto, 60-sheet boxes, $\$2.40$; dull, 75-sheet boxes, $\$2.50$; all-bright, "Garth," $\$2.90$ per box; ditto, "Alaska," $\$3$.

TIN PLATES—Trade is good this week. Quite a number of large sales of cokes have been effected, and trade in charcoal is considerably better, particularly in the 20 x 28 sizes. We quote as follows: Cokes, $\$3$ to $\$3.10$ for 14 x 20; do. squares, $\$3.15$ to $\$3.25$; $\$6.25$ for 20 x 28; charcoal plates, $\$3.50$ to $\$3.60$ basis for good brands.

TERNE PLATES—Trade has fallen off, only a few orders having been received during the week. We quote: I C, $\$6$ to $\$6.25$; I X, $\$7.50$.

SHEET LEAD—Trade is fair. We quote: $5\frac{1}{2}$ c. per lb.

COIL CHAIN—The improvement noted last week has been maintained. We quote:

$\frac{1}{4}$ in., $4\frac{1}{2}$ c.; $\frac{3}{8}$ in., $\$3.70$; $\frac{1}{2}$ in., $\$3.25$. Large quantities can be shaded.

SHEET ZINC—Trade is still active. No fresh arrivals of the standard weights have been received, but the difference between the next gauges is so small that very few dealers object to taking them instead. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

SOLDER—Trade is unchanged. We quote: Standard, 11c.; strictly half and half, $11\frac{1}{2}$ to 12c.

ANTIMONY—Business is not as good as it was a week ago. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

Trade has not yet fallen off to any extent. The demand is good, especially for the first two breaks. Stocks are not heavy. Prices are unchanged. We quote: First break in 50-foot boxes, $\$1.35$, and in 100-foot boxes, $\$2.60$; double diamond, under

ESTABLISHED 1860.

INCORPORATED 1895.

Tinned Iron "Lion and Crown"

Amongst other sizes in stock we have the following :

50 x 15 x 16

50 x 15 x 17

50 x 16 x 16

FOR WHICH WE SOLICIT ENQUIRIES.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

Business generally has dropped off considerably in the last week, though some houses report the receipt of good mail orders. The oil and turpentine market is still in good condition. More white lead has been going out. Varnishes, dry colors and gum shellac are moving nicely. The putty trade is brisk, in sympathy with the excellent glass trade. Plaster paris moves slowly. Prices are unchanged.

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

Business is in fair condition. The demand is good, but manufacturers want lower prices, which are same as last week. We quote as follows: Agricultural

scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25 to 30c.; No 1 wrought scrap, 40 to 45c. per 100 lbs; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2½ to 2¾c.; zinc, 2c; scrap rubber, 3½ to 3¾c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c per 100 lbs.

SEEDS.

The demand from foreign markets has very much fallen off the past week or two, and this has a tendency to depress values here, in fact prices may be called nominal just now. Red clover, \$3 to \$3.25; alsike, \$3 to \$4.50, and timothy, \$1 to \$1.25 per bushel to shippers at outside points.

HIDES, SKINS AND WOOL.

HIDES—The market is strong, with upward tendency for cured hides. We quote for both cowhides and steerhides: No. 1, 9c.; No. 2, 8c.; No. 3, 7c.

CALFSKINS—We quote as follows: No. 1 veal, 8 lbs. and up, 12c. per lb.; No. 2, 10c.; Dekins, from 30 to 35c.; culls, 15 to 20c.

SHEEPSKINS—We quote: Lambskins and pelts, 75 to 90c.

WOOL—Pulled wools are moving satis-

NEW STAR DOUBLE HEATER

We beg to advise our numerous customers that we are now making the "NEW STAR" in a Double, as well as a Single Heater.

We expected to show engravings before this, but as there has been considerable delay in getting same out, we ask our customers to please see photographs with which our travellers are supplied.

The D. MOORE CO., Limited, HAMILTON, CANADA

factory. We quote supers at 21 to 22c.; extras at 22 to 23c.

PETROLEUM, ETC.

Business is still brisk, with prices unchanged. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; Canadian water white, 17c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

COAL.

The demand this week has been brisker, both locally and throughout the province. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46, net tons.

MARKET NOTES.

Canada plates are dearer.

Churns have been advanced about 14 per cent. in price.

UNITED STATES MARKETS.

NEW YORK, Nov. 17, 1897.

PIG TIN—Better cables from London and advices of comparatively moderate shipments from the Straits during the first half of the month served to give the market decidedly stronger tone. Five-ton lots were quoted at 13.80 to 13.85c. in store and 13.85 to 13.90c. free on board, with very fair sales. The Straits shipments included 675 tons to the United States, 210 tons to London and 600 tons to the Continent, against 1,610 tons in the corresponding period last year.

COPPER—There is no improvement in operations here and the demand generally is slow, with the call wholly for small lots for early delivery. Prices are rather weak at about 10¼ to 10¾c. for Lake Superior and 10½ to 10¾c. for other kinds. European supply was returned as being 33,250 tons, against 34,430 tons at the beginning of the month.

PIG LEAD—Buyers are still very indifferent and there is little or nothing doing outside of ordinary hand-to-mouth business. Prices are unsettled and rather weak at about 3.75 to 3.80c. for common. London cable quoted £12 18s. 9d. for soft Spanish.

SPELTER—The movement of this metal here continues slow and there is no improvement in the demand. Prices hold fairly steady, however, at 4.20 to 4.25c. London cable was firmer at £18 for good merchant brands.

ANTIMONY—A moderate business only is passing and prices remain at 7 to 8¼c., as to brand.

TIN PLATE—The market remains in a very quiet condition, and prices are weak but without quotable change.

IRON AND STEEL—Nothing more than fair business is being effected in any line,

and new enquiries are comparatively few also. Prices generally were quoted unchanged.

MANITOBA MARKETS.

WINNIPEG, Nov. 15, 1897.

GEO. D. WOOD & Co. succeeded in finishing the foundation of their large new warehouse on the corner of McDermott and Arthur streets, before the frost and snow set in, and it will be ready to receive the superstructures as soon as spring opens. Saturday afternoon and Sunday the snowstorm from the west struck Winnipeg, and about six inches of the beautiful fell. Sleighing is therefore very good in the city. The rinks are making preparations for opening, old skates are being overhauled and new ones bought. Altogether, after one of the finest fall seasons in the history of the province, Winnipeg has settled down to winter, winter sports and occupations, and winter business.

Campbell Bros. will open in their old stand in the course of a week or ten days. The appraisers are just through with their work of adjusting the fire losses, and once that matter is settled, the business will be re-opened without delay. It was a hard blow for this firm to be burned out just when the fall trade in stoves was in full blast, but they have plenty of pluck and will be well to the fore again before long. Speaking of the fall trade in stoves it has been very brisk this year, and a number of new stoves designed for the purpose of burning native coals are being tried.

In general hardware the trade is quiet with prices firm and without change. The advance in wire nails in the east has not yet effected this market, and though barbed wire would be higher if there were any trade moving, at present the price is unchanged.

The setting in of winter has brought back to the city many men who have been prospecting for mines all summer.

The demand for coal and wood has increased with the cold weather and the advances noted last week still hold. The Souris coal is in good demand from country points, and it is for this coal particularly that new designs of stoves are being used. The increased consumption of coal at country points is attributed to the reduction of the freight rates from these mines. This reduction, however, does not affect Winnipeg, as it is only for points not more than 200 miles from the mines, and Winnipeg is nearer 300 than 200 miles.

The only change in price to be noted is the drop of 3c. per gallon on linseed oil, which is another proof that it is the unexpected which always happens, as no one here looked for a decline on this product.

There is still quite a brisk business in glass, but this will probably not last over another week.

Quotations are as follows:

Barb wire, 100 lbs.	\$2 60
Plain twist wire and staples	2 75
Oiled annealed wire	10 2 80
"	11 2 90
"	12 3 00
"	13 3 15
"	14 3 30
"	15 3 65
Wire nails, 30 to 60 dy, keg	2 65
" 16 and 20	2 70
" 10	2 75
" 8	2 80
" 6	2 95
" 4	3 05
" 3	3 30
Cut nails, 50 and 60 dy	2 50
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	

SITUATION WANTED.

HARDWARE SALESMAN WANTS SITUATION
Six years' experience; best of references. Box 3,
HARDWARE AND METAL. (47)

FOR SALE.

A CHANCE SELDOM OFFERED TO SECURE
an established business in one of the best towns in Canada; reason for selling, retiring from business; cash or half cash offers with approved security will be received up to Nov. 25th, 1897. B. D. Steacy, Hardware Merchant, Box 720, Brockville, Ont. (47)

PARTNER WANTED.

PARTNER WANTED FOR AN ESTABLISHED
Hardware Manufacturers' Agency, in Montreal, representing good factories; replies confidential. Address, stating business experience and capital, "H. M. A." care HARDWARE AND METAL, Board of Trade Building, Montreal.

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

IF YOU WANT TO ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL - - TORONTO



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

WHEN WRITING ADVERTISERS
PLEASE MENTION THAT YOU SAW
THEIR ADVERTISEMENT IN THIS PAPER

Horse shoes, iron, light, medium and heavy, keg.....	\$4 00
Snow shoes.....	4 25
Steel, light.....	4 25
" extra light.....	5 75
Bar and band iron, \$2.10 basis.	
Swedish iron, \$5 basis.	
Tool steel, Black Diamond, 100 lbs.....	8 00
Jessop.....	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs..	3 50
26 gauge.....	3 75
28 gauge.....	4 00
Galvanized American, 16 to 24 gauge.....	4 00
26 gauge.....	4 25
28 gauge.....	4 50
Genuine Russian, lb.....	12
Imitation.....	8
Tinned, 24 gauge, 100 lbs.....	7 25
26 gauge.....	7 50
28 gauge.....	8 00
Tin plate, IC charcoal, 20 x 28, box.....	9 00
IX.....	11 00
IXX.....	13 00
Canada plate, 18 x 21 and 18 x 24.....	3 25
Sheet zinc, cask lots, 100 lbs.....	6 00
Broken lots.....	6 50
Pig lead, 100 lbs.....	4 25
Wrought pipe, black, 1/4 inch.....	2 50
" 3/8 inch.....	2 75
" 1/2 inch.....	3 00
" 3/4 inch.....	4 00
" 1 inch.....	5 00
" 1 1/4 inch.....	7 00
" 1 1/2 inch.....	8 50
" 2 inch.....	11 50
" Over 2 inch.....	65 p.c.
Rope, sisal, 7-16 and larger.....	6 75
" 3/8.....	7 25
" 1/4 and 5-16.....	7 75
Manilla, 7-16 and larger.....	8 25
" 3/8.....	8 75
" 1/4 and 5-16.....	9 25
Cotton, all sizes, lb.....	15
Axes, per box.....	\$5.50 to 8 00
Screws, flat head, iron.....	85 p.c.
Round.....	77 1/2 p.c.
Flat " brass.....	80 p.c.
Round ".....	72 1/2 p.c.
Bolts, carriage.....	60 p.c.
Machine.....	60 p.c.
Tire.....	55 p.c.
Sleigh shoe.....	65 p.c.
Rivets, iron.....	50 p.c.
Copper, No. 8, lb.....	25c.
Spades and shovels.....	40 p.c.
Harvest tools.....	.60 to 60-10 p.c.
Axe handles, turned, second growth, hickory, doz.....	2 50
No. 1.....	1 50
No. 2.....	1 25
Octagon extra.....	1 65
No. 1.....	1 25
Ammunition, cartridges, Dominion R.F. 50 p.c.	
Dominion, C.F., pistol.....	25 p.c.
" military.....	15 p.c.
American R.F.....	35 p.c.
C.F. pistol.....	5 p.c.
C.F. military.....	Net.
Loaded shells, Eley's 12 gauge, M.....	16 00
American, M.....	16 20
Robin Hood, M.....	18 00
Shot, ordinary, per 100 lbs.....	6 00
Chilled.....	6 50
Powder, F.F., keg.....	4 75
F.F.G.....	5 00
Robin Hood.....	10 00
Tinware, pressed.....	.70 and 30 p.c.
Granite ware, according to quality.50 and 10 p.c.	

NICKEL-ALUMINUM WIRE.

The Pittsburg Reduction Co. is now drawing a nickel-aluminum wire, which is said to be much stronger and stiffer than wire made from the pure metal. Hitherto it has generally been considered impossible to draw aluminum into wire when alloyed with other metals. The wire is used for purposes requiring stiffness. A good deal of it is employed for making hairpins.

Str. Micmas landed at Pictou, N.S.; this week 3,000 tons iron ore from Bilbao, Spain.

AMONG THE RETAILERS.

Sporting Goods Windows.

The John Griffiths Cycle Corporation, Limited, have this week in their windows an attraction which continually draws great crowds of spectators. One of the windows is chalked off as a foot-ball field, with goal-posts, etc. Some 30 dolls are dressed in regular foot-ball attire, and are so arranged as to give a complete representation of the game, especially the scrimmage and quarter backs, who are right at it over a miniature pigskin. The other window draws the crowds, however. In this window, Prof. McFadden, an authority on physical culture and inventor of an improved exerciser, gives exhibitions of the usefulness of his invention. The John Griffiths Corporation are backing up this exhibit by a number of these exercisers in the store to personally explain the advantages of the idea.

When one looks through some of the many sporting goods stores in Toronto and then remembers the meagre space and time given for the display of these goods in the hardware stores in the majority of country towns, the question naturally arises, "Why do not country merchants push these goods more?" I remember well, when I was going to school in a country town, how we tried to get a football, some shin-pads, etc. Our club had been organized for months, yet not one of the dealers had the foresight to get a supply of such things. The result was, we had to send away for them, and received with our order a catalogue, which was the means of selling many goods to us. I have known of many such cases, and besides, there are various articles which, though there may be no demand, can be pushed to make a good business in.

Pushing Trade.

I saw last week an article which, from a retailer's standpoint, should be a good investment. It was the price-list issued every fall by Wilkins & Co., King street east, well illustrated, and giving a full list of their wares. This is sent to their customers before the fall trade opens up, and is a constant reminder of the necessity of purchasing certain articles before winter comes, enabling a farmer to calculate weeks ahead the cost of his investments in hardware. Wilkins & Co. find this a profitable investment, as would any others who might venture out in this line.

Conditions of Trade.

Business this week has been running nicely. The city trade has been good all round, and the hardening up of the country roads has brought in a large number of farmers,

who have bought freely in general small hardware, stoves, etc. Taking it all round, it has been admitted on all sides that this fall has been one of the largest and steadiest seasons for years.

THE RAMBLER.

THE ONE-MAN POWER.

THE problems that confront the modern business man require for their solution not only the deepest thought and most careful consideration, but likewise a readiness of decision and promptness of action that is only possible where one man, or, at best, two men, are in control, remarks Iron Age.

Experience has shown that whatever may be the merits of boards of directors as counselors and advisers, they do not possess that prompt judgment that is so often needed in emergencies. If in much counsel there is much wisdom, there is also much delay, and while undue haste is bad, unreasoning hesitation is even worse, for mistakes may be remedied, but lost opportunities do not present themselves again. It is a trite saying that "Councils of war never fight," and it is not recorded that Napoleon ever submitted his judgment to that of his marshalls. He listened to their advice, and then took the decision upon himself.

If a reckoning be made of the most successful concerns in this country, especially among manufacturers, it will be found that almost without exception success has been due to the dominating influence of one master mind, who has impressed his individuality upon the concern and imparted his spirits to its members. He often has associated with him an equally strong character, dissimilar, yet of like nature, thus forming the needed complement.

Only in this way is it possible to have harmony of purpose and unity of action, without which success cannot be had. We know full well from our experiences in the field of legislation that nothing is so fatal to the prompt execution of business as to place it in the control of many people. In times of emergency one strong determined man in the executive chair is worth a hall full of clamoring legislators. In the rush of modern business life decisions must be made quickly if we are ever to get through with our work. Constant and aggressive action is necessary if we are to keep pace with the times. There must be some one in command to override trivial objections and to prevent delays, to enforce obedience, to command loyalty, and to determine those principles of action that may not be departed from.

There are not wanting instances among us of manufacturers who, in spite of wealth and prestige, have never yet been in touch with the best and most advanced thought of the business life of to-day, because there were too many of them engaged in running the machine, and they never reached a conclusion till the time for action had passed.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

W L. KEMPFER, New Carlisle, Que., has been appointed curator of G. W. H. McKenzie, general merchant, New Richmond, Que.

McLachlan & McFerlane, merchants, Hall Siding, B.C., have assigned.

J. A. Francis, general merchant, Essex, Ont., is endeavoring to compromise.

A. L. Stackhouse, general merchant, Masson, Que., has made an abandonment.

Hercule Chene, general merchant, Cheneville, has assigned to Lamarche & Benoit.

Louis Guay, general merchant, Malbaie, Que., has compromised at 60c. on the dollar.

W. C. Norman, manufacturer of spring beds, Montreal, has had consent of assignment filed.

Gagnon & Caron have been appointed curators of Beauchamp & Deslauriers, sash and door manufacturers, St. Henri de Montreal, Que.

G. A. Marion, general merchant, Rockland, Ont., has assigned to James Piper, and a meeting of his creditors will be held in London on the 22nd inst.

C. & G. J. Wilson, general merchants, Cumberland and Masson, Ont., have assigned to A. P. Muchmore, with liabilities amounting to about \$45,000; the assets are about the same figure.

PARTNERSHIPS FORMED AND DISSOLVED.

Gagnon, Spragge & Co., dealers in railway supplies, Montreal, are about to dissolve.

Hunter & Blackwell, carriage makers, Toronto, have dissolved, Wm. J. Hunter to continue.

F. and A. Matte have registered as proprietors of the firm, Matte & Fils, saw mills, Lac Sargent, Que.

Esnouf & Bushey, sash and door manufacturers, Richmond, Que., have dissolved, Thos. G. Bushey to continue.

The Knowlton Electric Light Co., Knowlton, Que., have dissolved, and Austin W. Peters has registered as proprietor.

Bowman, Kennedy & Co., wholesale hardware and coal dealers, London, Ont., have dissolved, John Bowman to continue under the style of the John Bowman Hardware and Coal Co.

SALES MADE AND PENDING.

Fred. G. Palfrey, general merchant, Bridgetown, N.S., has sold out.

J. K. McCulloch, bicycles, etc., Winnipeg, has sold out his business.

L. Siegner, harness maker, Newton, Ont., has sold out to C. Boeckner.

George Kydd, blacksmith, Emo, Ont., has sold out, and is removing to Lockington, Ont.

The stock belonging to the estate of A. J.

Wilson, dealer in stoves and tinware, Niagara, Ont., is advertised to be sold on the 23rd inst.

Marwin & Tilton, hardware dealers, Victoria, B.C., have sold out to Walter S. Fraser & Co.

The stock belonging to the estate of T. J. Nicholls, general merchant, Gorrie, Ont., has been sold.

The stock of the estate of Munro & Kitley, general merchants, New Dundee, Ont., is advertised to be sold by auction on the 24th inst.

The property, etc., of the Guelph Norway Iron and Steel Co., Limited, who are in liquidation, Guelph, Ont., is advertised to be sold on the 24th inst. by auction.

The business of Paxton, Tate & Co., manufacturers of mill machinery, Port Perry, Ont., has been sold to Madison Williams, who continues under the old style.

CHANGES.

Odilon Boulet, hardware dealer, Quebec, has retired from business.

H. Eyolfsson, hardware dealer, Saltcoats, Man., has commenced business.

Joseph A. Arsenaault has started business as a blacksmith in Summerside, P.E.I.

T. L. Willis, general merchant, Malvern, Ont., has been succeeded by Harvey Willis.

Lockhart & Sons have commenced business as saw and grist millers in Lockington, Ont.

F. E. Campbell, general merchant, Scotland, Ont., has been succeeded by I. L. Henry.

Gilbert E. Carters has commenced business as general merchant in Rosthern, N.W.T.

F. S. Manning & Co. have commenced business as general merchants in Winchester, Ont.

Application is to be made for the incorporation of the Chaudiere Valley Railway Co., Quebec.

Application is to be made for the incorporation of the Boas Manufacturing Co., St. Hyacinthe, Que.

Application is to be made for the incorporation of the St. Lawrence Anchor Fence Co., Limited, Montreal.

The capital stock of the W. R. Gardner Tool Co., Limited, Sherbrooke, Que., is to be increased to \$150,000.

Wilbrod Bertrand, dealer in hardware, flour, grain, etc., Quebec, has been succeeded by O. Boulet in the hardware line.

G. W. Ray, general merchant and lumber dealer, Newdale, Man., has added to his business a furniture and undertaking department.

FIRES.

D. Davidson, sawmill owner, Penetanguishene, Ont., has suffered loss by fire.

The flax and saw mills, Drayton, Ont.,

belonging to Rollock, have been damaged by fire.

DEATHS.

Frederick Fairman, president of the Dominion Wire Manufacturing Co., Limited, Montreal, is dead.

THE MAPLE.

(The Canadian National Tree.)

O maple, tall and slender,
Filled with the sun's rich wine,
Whether on open hillside
Or on the forest line,
You brim with your glad splendor,
The June-world's cup divine.

With warm light overflowing,
O strong and stately tree,
You spread your bounteous branches
To all glad airs that be.
O tree, of all trees growing
The dearest one to me.

All through the golden summer
Your leafy tents you spread,
When out by field and highway
The noon lies parched and red;
And out in the fields the cattle
Doze by the brook's dried bed,

When late in ripe September
Earth's fruits are gathered in,
And wealth of glowing plenty
O'erflows each brimming bin,
You with your flaming splendors
The autumn's triumphs win.

And when in bleak October
The frosty nuts do rain
And earth, more grave and sober,
Hath wrapped her pall again;
Through your great boughs the storm-wind
Goes roaring like the main.

O tree of mine own country,
I love your stately green;
Old memories of my childhood
Blow your warm leaves between,
And past your leafy radiance
Haunts each familiar scene.

Like you upon your hillside,
Filled with earth's golden glow,
Strong, towering proud to heaven
When happy June winds blow,
O tree, may my young country
In days to come outgrow.

Like you amid the forest
May she 'mid nations tower,
A Titan proud and mighty,
Filled with earth's gladdest dower,
While 'neath her widening branches
A people's hopes embower.

—Pall Mall Gazette.

TIN SCRAP.

In the course of a recent conversation with a broker in scrap metals, the information was developed that there is a very large and steady export movement of tin scrap from the Atlantic Coast to Europe. The amount of tin plate clippings made by the large tinware and can-making factories of the country is very considerable. Some of the more extensive works in this line put out from 50 to 100 tons of scrap tin monthly. This material, in most instances, is sold to exporters under a yearly contract. It is baled at the factory and shipped to Antwerp, from whence it is sent to a separating works in Holland, where, by a special process, the tin is recovered and made into pigs, while the steel scrap is sold for various purposes. The average value of the tin plate scrap, in bales, delivered at the dock in New York is about \$5 a ton. Some of the smaller tinware factories, which have no facilities for baling their scrap, dispose of it loose to the manufacturers of sash weights.—Iron Age.

ADDRESSING CUSTOMERS.

Have you ever tried to cure your clerks of the habit of calling your feminine customers "Lady," "Mrs. Lady," etc. If not, you should begin at once, and hit upon a uniform method of addressing them, instead of resorting to "Hi, say," "Missis" and "Ma'am," etc. The other day I happened in a store where one of the clerks had evidently been giving this subject some consideration, and he was getting on gloriously by the use of the word "Madam." But there is no rose without a thorn. Among the customers in the store that day was a colored girl, and, as she was not looking in the direction of the clerk as he finished tying up the package, he said: "Madam, here is your package." She at once gave him an angry look and said with marked severity: "Who's yer callin' madam? Watcher mean by insultin' me? I'd have you know I'm a lady, I am." With which she hustled indignantly to the street.

This is surely a case where ignorance was bliss; but try and get your boys to use the word "Madam," since it is never out of place and applicable to all situations. Then there need be no fear of calling an unmarried woman "Missis," or a married woman "Miss;" and, furthermore, your feminine trade will feel honored.

EDMONTON ROUTE TO KLONDIKE.

A Calgary despatch says: "Another party of Klondikers, numbering ten, is in the city waiting for Monday's train to Edmonton. As the Edmonton route becomes more known its popularity increases. The police survey party, under Inspector Moodie, is making rapid headway. As soon as the snow falls they will kill their horses for dog meat and proceed by dog train. The grass along the route has been very plentiful this year and horses have no difficulty in finding sustenance for the journey. The American parties find they can outfit in every department cheaper here than in their native states. In some cases the initial cost is less in Calgary, in others the added freight makes it cheaper to purchase supplies here."

SENSIBLE BUSINESS MEN.

Mr. J. A. McKerchar, merchant, Main street north, has been approached by a number of ratepayers and has consented to run for school trustee in ward five. Mr. John McKechnie, who has served one term on the school board, has again consented to run for ward four. Mr. Angus Brown, a well-known city merchant, has also consented, upon the solicitation of a large number of friends, to stand in ward five. He has been a member of the board for several years.—Free Press, Winnipeg.

**ACME and
HOCKEY
SKATES**

Variety of Patterns in Stock

LAMPLOUGH & McNAUGHTON, 59 St. Sulpice Street, MONTREAL

Just received, new stock of Cutlery manufactured by

H. BOKER & CO.

UNRIVALLED LINES OF

**SCISSORS RAZORS
POCKET CUTLERY**Try this famous maker's Single and
Double Blade Jack Knives.**Caverhill, Learmont & Co., Montreal****INSURE YOUR LIFE IN THE
CONFEDERATION LIFE ASSOCIATION****The right man**to fill a responsible place in business is the one who
looks ahead and provides for future contingencies.**The right man**to have the responsibility for the welfare of his wife
and family is he who makes provision for their com-
fort in case of his death.**The right man**knows that to insure his life is the only way to make
such provision, and he knows that**The right policy**is the UNCONDITIONAL ACCUMULATIVE Policy of the**CONFEDERATION LIFE ASSOCIATION**It contains one condition only—that is the payment
of the premium. Rates and full information will be
sent on application to the Head Office or to any of
the Agents of the Association.**HEAD OFFICE—TORONTO.****W. G. MACDONALD,**
Actuary.**J. K. MACDONALD,**
Managing Director.

TRADE CHAT.

PICKERING, ONT., correspondent of The Whitby Chronicle. "Raspberries and roses have made their appearance hereabouts during the past fortnight. To be sure the crop is not very extensive, but the quality is good."

"May it rest in pieces," as the Irishman said after his bicycle had been chewed up by the trolley car.

T. J. Carroll, of the Hamilton Brass Co., has been asked to be an aldermanic candidate in Ward 6 that city.

He—They say bicycles are a drug on the market this year. She—That must be the reason all the doctors are prescribing them.—Ex.

The merchants of Brandon, Man., report that their trade continues good and they look forward to its keeping up at least until after Christmas.

The stock of T. J. Nicholls, general merchant, Gorrie, was sold by auction to A. Dulmage, of Lakelet, for 67c. on the dollar. The stock was valued at \$4.500.

The record of cars passed through the St. Clair tunnel during October indicates a good traffic. About 20,000 cars is a good average, but 22,763 went through during that month.

The Department of Inland Revenue is considering a proposed modification of the regulations respecting weights and measures. At present, under existing regulations, the use of spring scales is forbidden.

The well-known firm of Hughes & Long, lumber dealers, Brandon, Man., will in future be known as Hughes, Long & Buchram. Mr. Buchram, a lumberman of Minnesota, has taken an interest in the business and becomes a partner in the firm.

"A little application," said the colonel, "appears to be all that is necessary in learning to ride the bicycle." "That depends," replied Mrs. Cobb, very emphatically. "I had a cousin who applied a whole bottle of arnica in learning to ride, and she can't stay on yet."

The Canada Fence Co., of London (W. S. Bryers Barkwell, president), have been awarded the contract to fence with their Diamond Grip fence (patented) the new line of Tilsonburg; Lake Erie and Pacific Railroad, running from the Air Line, Tilsonburg, to the Michigan Central.

The Reston, Man., correspondent of The Winnipeg Free Press writes. "Our village is booming just now and as a great terminal point on the C.P.R., why shouldn't we? In this respect we are like Halifax, only we are at the wrong end. The following buildings have been or are being erected this season: Large addition to G. S. Munro's general store; improvements on B. Sher-

rin's hardware store; Methodist manse; W. Busby, large residence; Harry Lusk, barber shop and dwelling; Methodist church, 26 x 42, and several more buildings are on the tapis."

The Morden, Man., correspondent of The Winnipeg Free Press: "Plowing is well advanced this fall. The past season, with the favorable price paid for wheat, has been a profitable one for farmers in general, and in consequence bank accounts have been increased, and existing encumbrances materially reduced."

If you find it awkward to clean a bicycle with gloves on your hands, rub a little vaseline thoroughly into the hands, especially about the tips and base of the finger nails. If this hint is followed, before cleaning the dirtiest machine, you will experience no difficulty whatever in cleaning the hands after by ordinary means.

"Say, you fellows, I have a riddle for you. Why are the Montreal aldermen like the Toronto aldermen? Don't know? Because they both try to pass by-laws restricting cyclists and both fail; but with this difference, that in Montreal they are so busy they have not time, and in Toronto the cyclists will not let them."

There was a hot time in the Stacey Hardware Manufacturing Co.'s store, St. Thomas, Saturday night. The metal roof became charged with electricity from the electric wires and the current ran down the iron pillar and stones. The safe chains were so charged that it was dangerous to touch them and business was temporarily suspended.

THE MCCLARY'S EXPANDING.

The McClary Mfg. Co., Limited, have purchased the four-storey buildings in King street, Montreal, formerly occupied by R. & W. Warrington as a stamped-ware factory; also the adjoining property. The object of the company in acquiring this property is to start a branch factory in Montreal.

The following from The London News shows that the firm is also branching out on the Coast: "Moore & Henry, the well-known architects, have submitted plans to the McClary Mfg. Co., of this city, for a large storehouse, which it is proposed to erect at Vancouver, B.C., at a cost of \$10,000."

A CHEAP PIPE-CUTTING MACHINE.

Curtis & Curtis, manufacturers of the Forbes' patent die stock pipe-cutting and threading machines, Bridgeport, Conn., are sending out to those interested a four-page circular to the effect that they have made changes in their No. 116 power pipe-cutting and threading machine, such as will make it more simple, compact, effective and better every way, and that these changes have enabled them to build it at such less cost as to allow them to reduce its price from \$1,500 to \$1,200. The circular also gives details and an illustration of the machine.

Curtis & Curtis are also putting on the market a patent chain pipe wrench, which, it is claimed, has many advantages over the ordinary pipe wrench.

TALKING OF MOVING.

Another of Montreal's industries, viz., Major Bros. & Co., manufacturers of tar felt, straw board, etc., are thinking seriously of leaving the city and settling in Cornwall. At a special meeting of the Council of that town, Mr. Major was present and stated that his firm would like to move to some place where they could better expand their business. If sufficient inducements were held out they might go to Cornwall and build a mill for the making of their wares from the raw material. This mill would employ 40 or 50 hands. They would like a site of ten acres of ground. A bonus and water power were also mentioned. A committee was appointed to confer with Mr. Major as to site, terms, etc.

BUSINESS ON KLONDIKE ACCOUNT.

The Hudson's Bay Co. is besieged with enquiries from persons desiring of going to Klondike by the routes familiar to the officials and servants of the company. Many persons are writing from United States cities, and from all indications a very large business in outfitting will be done this winter and spring by Canadian firms. A number of parties are being organized in the province to go out as soon as the trip is feasible.—Free Press, Winnipeg.

NEW FREIGHT RATES.

On November 15th the new freight tariff on the C.P.R. and G.T.R. came into effect. The rates out of Montreal have been increased on general merchandise, and also on special commodities, which include nearly all lines of general hardware, except iron goods. The commodity rates on nails, angle bars, chain, iron pipe, galvanized iron, pig iron and other similar heavy goods will not be changed until the New Year.

Baylis Manufacturing Co.

16 to 30 Nazareth Street, MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

HOUSE FURNISHING HARDWARE.

THE goods of general furnishing hardware are always in request in a greater or less degree throughout the entire year, says Stoves and Hardware Reporter. This department necessarily requires a great deal of attention in order to keep the stock up to the demands of the trade. It is not a good plan to leave the superintending and sale of goods too much to the clerks. They do not as a rule take a sufficient interest in the care of the stock to keep a strict account of what the majority of customers' wants consist. There is in every and all classes of goods certain lines and styles which find greater favor than others. It should be the special care of the merchant to ascertain these demands by direct contact with customers, in waiting on them and conversing with them. Practical experience teaches people more than all theorizing and speculation which can possibly be indulged in. A merchant himself may be very much in favor of certain styles of goods, and be weak enough to be imposed upon by the blandishments of an insinuating drummer in being persuaded to buy heavily of a class of furnishing hardware which patrons may not care for and which finally he is forced to sell without profit in order to get rid of them. In hardware as well as other lines of merchandise, large numbers of novelties are put upon the market each season. Novelties can never rank as staple goods, for the simple reason that nine times out of ten they are impractical and frequently very nearly useless. We will enumerate some of these at different times.

COKING COAL.

The practice of coking and briquetting refuse coal by washing and jigging was first started in Europe, says an exchange. It has been done to such a degree almost over the entire continent that coke can be guaranteed to contain but a small per cent. of ash. The fact that Americans have not practiced this system for a sufficient length of time accounts for the comparatively slow progress made in the making of briquettes. As yet foreign countries take the lead in this industry; they understand to the fullest extent the importance of properly preparing the coal in order to make the briquetting, of what would otherwise be waste coal, a great financial success. The freer coal is from all impurities the more valuable it becomes, naturally. Slate and ash both cause a deterioration in price, especially where they exist in any noticeable quantity. All these impurities add to the weight of the coal and consequently increase the cost of transportation. The latter is a point always to be taken into consideration in decreasing expenses in order to increase profits.

We just want to say again—for your good and for ours, that Boeckh's Flat Bridled Brush for Painters overcomes every possible fault of the old-fashioned twine-bridled brush. And it can't bulge in the centre. Book about it—free.

Chas. Boeckh & Sons
Mfrs. **Toronto, Ont.**

**That
Bridled
Brush.**



See our line of

Christmas Novelties

IN

**Sterling Silver and
Electro Silver Plate**

before placing your order elsewhere.

The Toronto Silver Plate Co. Limited.

Silversmiths and Manufacturers of Electro Silver Plate.

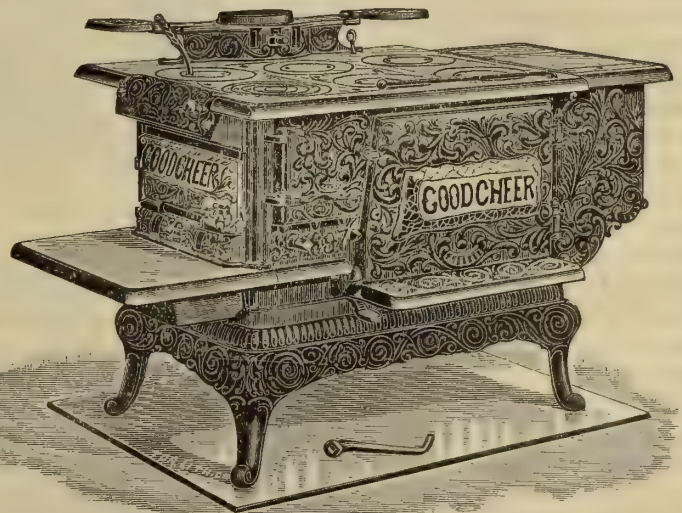
Factories and Salesrooms: **TORONTO, CANADA.**

E. G. GOODERHAM, Manager and Sec.-Treasurer.

Good Cheer Ranges

LARGE STEEL OVENS

Three styles each—Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

THE LATE MR. FAIRMAN.

MR. FREDERICK FAIRMAN, president of the Dominion Wire Manufacturing Company, and one of Montreal's prominent citizens, died at his home, No. 20 Macgregor street, Sunday morning. Mr. Fairman's illness was of short duration, for it was only a week ago last Saturday that he was out superintending the erection of some houses. It was here that he contracted a severe cold, which developed into pneumonia and caused his death.

Mr. Fairman was a native of Ontario, having been born in Gananoque, Ont., on June 19, 1839. He received his education in his native town, and afterwards entered Victoria College, Cobourg. His education completed, he entered the machinery and manufacturing firm of Mr. D. S. Abbott, Gananoque, subsequently purchasing a portion of the industry, which he carried on until 1884, when he accepted an engagement with Moreland, Watson & Co., of Montreal. He remained with this firm for five years, when he purchased a retail trade in Waterloo, Ont. In 1882 Mr. Fairman returned to Montreal, when he entered into partnership with Mr. Cooper, forming the well-known firm of Cooper & Fairman, which was dissolved in 1885. At this time Mr. Fairman accepted the presidency of the Dominion Wire Manufacturing Co., which he held until the day of his death. He was also identified for some time with the Dominion Bridge Co.

The deceased leaves, besides a widow, a family of four children, two sons and two daughters.

The funeral took place from his late residence, No. 20 Macgregor street, on Tuesday afternoon.

U.S. IRON AND STEEL IN BRITAIN.

A statement compiled by the Custom authorities of Great Britain shows that the tonnage of pig iron and steel billets imported into that country from the United States during this year to the end of September

was 56,000 tons of pig iron, while steel blooms and billets reached a total during that period of 24,900 tons.

ADJUSTING A MACHINE.

There is no machine that can do perfect work, however carefully it has been constructed, and at the same time it must be a poor affair indeed that does not come close to it. The imperfections that are left for skill and labor to remove are but slight in every case, and it is astonishing how little it takes sometimes to make quite a change in this respect when the correction has been

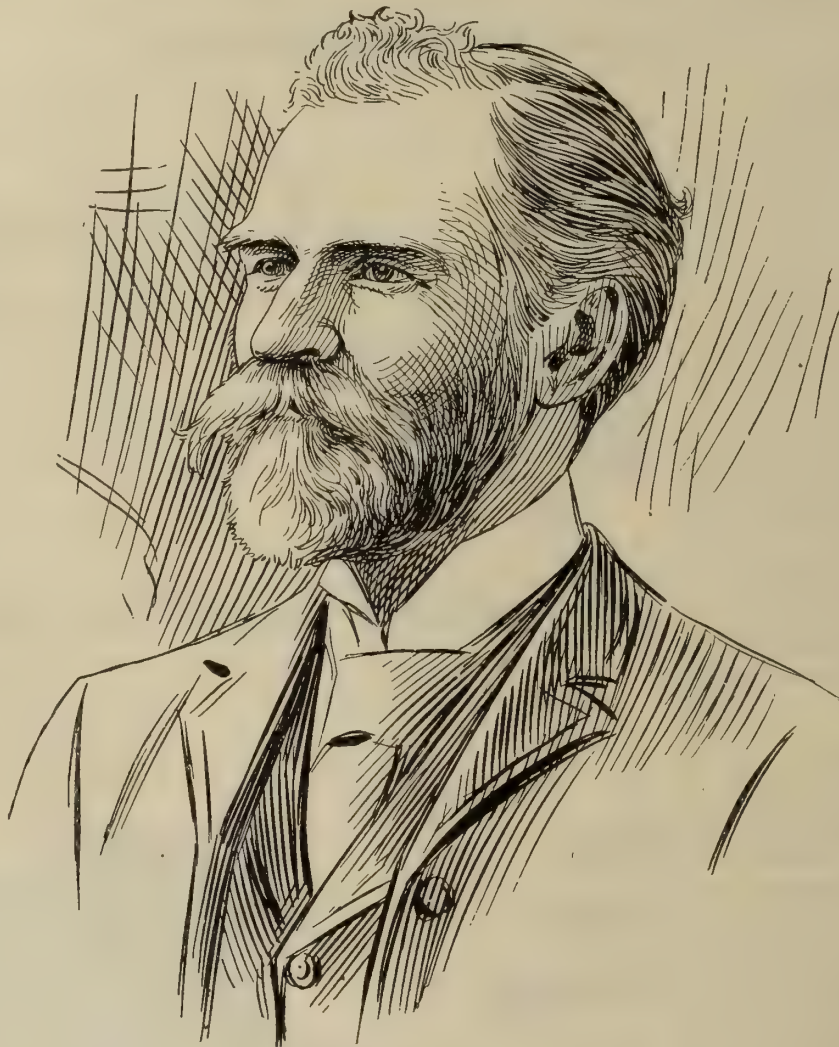
plain surface must need such treatment to bring it within reach of a surface plate, what must be expected with machine fits where surfaces of all kinds are to be yoked up together?

Not long ago a new machine was set to work that gave trouble at once. In looking it over it was discovered that there were two short lengths of shalting placed side by side in the frame for a carriage to move upon, held in place by four split boxes. Every mechanic had tested the shafts as to their being exactly parallel and out of wind, and no cause could be found for the machine

not working free and easy; but there was one in the gang that reasoned in this way: that a slight provision should be made for a little variation in the width of the shafts, whether any existed or not, and if arrangements could be made for a slight wind in the frame, so much the better. It took but a few minutes to scrape one of the boxes on all sides, and another so as to be slightly egg-shaped, leaving the carriage to run with as tight a grip on the shafts as before, but it has been a source of wonder to the rest of the crowd what on earth could have been done with a scraper that would make so much difference in the running of the machine.

A fly wheel, in some mysterious manner, seemed to creak on its shaft as though it was a little uneasy on its seat. It was removed and the engineer reached down into the hub with one of those hoe scrapers and

took off the thinnest layer possible just opposite the key seat, leaving it the widest in the centre. The wheel was replaced and the key driven in solid. The amount taken from the wheel was but a trifle, but it made a great difference in the set that it got with the shaft, without making any disturbance in the fit or the position of the wheel. The reverse is also true in relieving the friction of a shaft in its bearing. A shaft will turn twice as hard, so far as its own weight is concerned, if it rests in two places upon the sides than it would if relieved so as to rest on the bottom of the boxes. Machine tools



The Late Mr. Fairman

applied to the right spot. Work of this kind all rests entirely on two features. One is to be able to detect an imperfection, and the other to remove it. Take a planer, for instance. It will true up a surface so neatly that there are but few machinists who will care to improve upon it; but a surface plate, with a little marking, indicates at once that the finishing tool has been jumping over finger prints, and that there is quite a job for some one to remove the high places with a tool of some kind that will just skim over the surface and make an improvement in this respect. If a true,



Merchants should sell popular goods ; goods that their customers know all about ; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

have been selling so cheap that the builder either cannot afford or are not aware that there is a chance for some slight scraping in about every one of the fits, and to get the parts to settle down where they belong. There are machinists who have given their engine lathes over a week's work after they came fresh from the shop, before they got them down where it suited them. Take one of the centres, for instance. It is a fine job to settle one of them down with slight touches of a scraper where it will stand true in the very centre in every position. It does not seem possible that lathe builders can send out a tool so imperfect as to require so much labor to get it in working trim, and still it is a wonder that they get them so near perfect that they can be brought into shape by such slight changes that can be made with the process of scraping.—Boston Journal of Commerce.

STEEL TUBING COMBINE.

A Toledo despatch of Nov. 13 says : "A strong combination of steel tubing manufacturers has been perfected, and the new corporation will represent 90 per cent. of the tubing output of the United States. The combination is made up of the Brewer Seamless Tube Company, the American Weldless Tube Company, of this city ; the

Shelby Tube Company of Shelby, Ohio ; the Ellwood Tube Company of Ellwood, Pa., and the Greenville Tube Company of Greenville, Pa. The consolidation is called the Shelby Tube Company, and is capitalized at \$5,000,000.

SMALL ARMS AND AMMUNITION.

Edward C. R. Marks is delivering a course of ten lectures at the Birmingham Municipal Technical School on "Small Arms and Ammunition." His first lecture was a brief outline of the advance in the manufacture from the matchlock muskets of the 13th and 14th centuries to the "Lee-Metford" rifle. Abraham Hill had described a breech-loading gun as early as 1664, and the advantages of rifling the barrel of a gun were known at an even more remote period. Alexander John Forsyth patented the percussion system of firing in 1807, and this resulted in discharging the well-known flint-lock musket of the British Army. These were illustrated by lantern views, and a "Lee-Metford" rifle in various stages of manufacture was on view, whilst the War Office authorities have consented to send a number of samples for the better illustration of the lectures, which will be continued on Thursday evenings until Christmas.

A HARDWAREMAN MARRIES.

Mr. Wm. C. Lee, hardwareman, Goderich, was married the other day to Miss Maud Middleton, daughter of Mr. George Middleton, Goderich Township. Owing to recent bereavements in both families only the immediate relatives and one or two old friends were present. The house was gracefully decorated with ferns and chrysanthemums and with a background of these. The ceremony was performed by Rev. Mark Turnbull. The bride was given away by her father, and assisted by her cousin, Miss Marion Shephard, as bridesmaid, while Rev. C. A. Seager acted as best man to the bridegroom. Mr. and Mrs. Lee spent a few days in Toronto last week. **HARDWARE AND METAL** tenders its congratulations.

HAVE LEASED CANADIAN FURNACES.

A special despatch to The Halifax Herald from Bridgeville, N.S., says : "An American company have leased the Charcoal Iron Company's furnaces at Bridgeville, and have erected suitable plant and machinery in order to manufacture phenol-manganese. This is the first attempt in Canada in this line, and we trust it will be successful. The company has expended a large sum of money, and will in a few days be able to turn out the product."

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

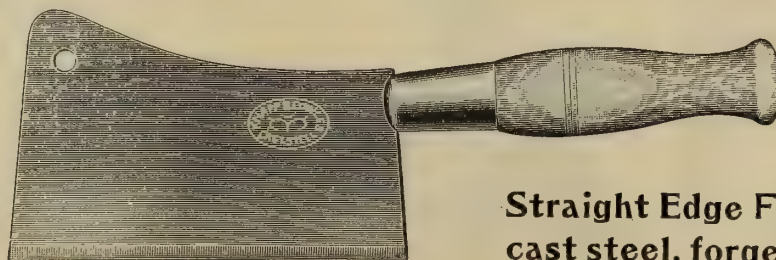
U. S. A.

SEND FOR

Catalogue..

of our Fall
line of

**HARDWARE
SPECIALTIES**



NO. 2 CLEAVER.

Straight Edge Family Cleaver. Best cast steel, forged ; with heavy steel ferrules. Perfectly balanced.

Plumber and Steam-Fitter

HEATING AND VENTILATING THE HOUSE PROPERLY.

THE proper heating and ventilation of the house, says a writer in a St. Paul paper, is one of the matters which at this season frequently comes up for discussion. One must have plenty of fresh, pure air to have good health, and this is what many women do not get through the winter, because they are shut up in houses not well ventilated. Few city houses are supplied with facilities for perfect ventilation. According to late-day science on this question every room in every house should have a ventilator either at the ceiling or at the floor, or both. In a recent house where a good deal of attention has been given to the ventilation there is a small ventilator near the ceiling and one in the base board of each room. The latter is connected with a pipe which goes to the kitchen chimney. This method is considered a good one, because the heat of the chimney creates a continuous current, thus drawing out the stagnant air at the floor, and when the hot air register is open the ceiling one needs only to be slightly open to secure excellent ventilation.

City architects and builders do not as a rule give much thought to the matter, so that housewives who have studied the subject and learned the importance of a healthful home atmosphere find themselves confronted with several practical problems. In the first place, even in the newest houses the furnace draws its cold air supply from the cellar. This can be obviated by the building of a cold air box, which will not cost over \$18 or \$20. "But my cellar is clean, so what harm can there be even if the furnace is fed from the cellar air?" asks the housewife, who has given little heed to the matter. A cellar may be kept comparatively clean and yet the walls will get damp and moldy, as will all underground places. Of course the sanitary condition of the air in a perfectly clean cellar is much better than that in one where there are decaying vegetables and accumulations of rubbish, and yet the air feeding the furnace should come from outside, as a moldy condition of the cellar generates disease germs, and modern science shows that heat does not kill the most dangerous of these, but rather raises them to life to be thrown into

the living rooms from the hot air registers. "What simple precautions can be taken by the householder when no provision has been made for ventilation by means of modern facilities?" is the question which bears most directly on this matter every season when the fires are started. One of the simplest schemes yet devised is to raise the window and put in the open space a fitted strip of board, so that when the window is closed down upon it about one inch will be left open between the two sashes. The fitted board prevents a draft and yet affords an entrance for fresh air between the sashes. The only makeshift where even this simple arrangement is not provided is to lower the window slightly from the top. When heat is first turned into a cold room the windows should be lowered from the top to provide a circulation and to let out the cold, stagnant air, which otherwise has no escape, and against which the warm air makes slow headway.

PLUMBING AND HEATING CONTRACTS.

Alfred Blais & Co., of Montreal, have the contract for plumbing, ventilating and No. 2 "Daisy" furnace for E. G. Savage.

E. C. Mount & Co., of Montreal, have the contract for plumbing, ventilating and roofing a house for Mr. Nelson Westmont.

John Foster, of Montreal, has received the contract for plumbing, ventilating and No. 3 "Daisy" furnace for T. T. Shurtleff Mayer, of Coaticook.

Fiddes & Hogarth, Toronto, have the contracts for the hot water heating of a store on Gerrard street east; for the hot water heating of a residence on College street,

and the hot water heating of an office and residence in Bracebridge for the Muskoka Leather Co.

The Bennett & Wright Co., of Toronto, Limited, have contracts for the heating and plumbing of the St. Lawrence, the largest hotel in Port Hope, and for the plumbing of a large residence in St. Joseph street, Toronto.

The John Ritchie Plumbing and Heating Co., Limited, Toronto, have contracts for the steam-heating, gas and electric fixtures of the Toronto House of Industry; for the heating of a house in Parkdale for Mr. George Long; for the remodelling of the steam-heating of the Metropolitan Church; for the remodelling of the plumbing of a residence for C. Neilson, Carlton street, and for the remodelling of the steam-heating of the Canada Loan building; for the Imperial Life Insurance Co., corner King and Victoria streets, Toronto.

PLUMBING AND HEATING NOTES.

The stock of G. Phillips & Sons, Quebec, has been sold.

The Fergus Board of Education intend to make alterations and improvements in their High School, to cost about \$3,000.

The Odorless Crematory Closet and General Heating Co., of Hamilton, Limited, have obtained a charter of incorporation.

Joseph Hunter, aged 65 years, plumber in the Halifax city works, died last week. He had been in the city's employ over 14 years.

Permits have been issued in Toronto to J. L. Coffee for dwellings to cost \$6,000 at 40 and 42 Tyndall avenue, and for the remodelling of 169-71 Victoria street as a

ARMSTRONG PIPE THREADING

AND CUTTING-OFF MACHINES

(Hand or Power)

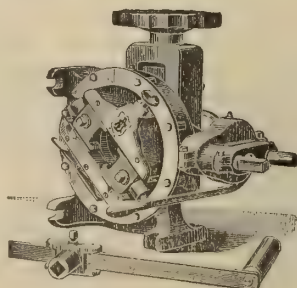
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

BRASS GOODS

FOR

Made only by the very best makers.

Steam-Fitters, Plumbers, etc.

Full line carried in stock. Low prices. Prices quoted on application.

MECHANICS SUPPLY CO., 96 St. Peter St., QUEBEC

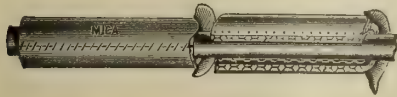
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Stair Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

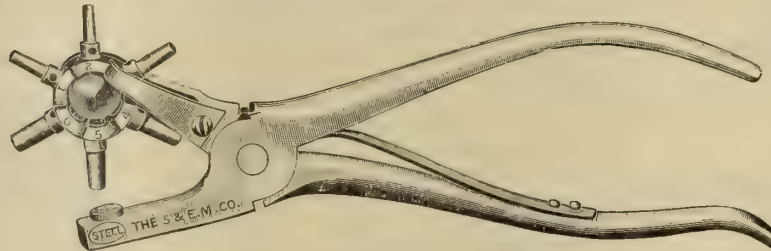
Hardware, Plumbers' and Bicycle Specialties.

OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897
CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian HARDWARE
AND METAL.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

Nurse's Home for St. Michael's Hospital at a cost of \$1,200.

The London Board of Health have sent to the Provincial Board of Health, now in session, asking the Provincial Board to ask the Ontario Government to so amend the laws so as to give power to municipalities to license plumbers, to inspect plumbers' work, and that they be given power to charge fees for such inspection.

Gray & Carlyle, plumbers, 203 Queen street east, Toronto, have dissolved partnership. Mr. Gray has taken his brother as partner, and the firm continues under the style of Gray Bros.

WHY STEAM PIPES ARE NOISY.

In all cases the pounding in steam pipes is caused by water, not air, says a contemporary. Water formed by the condensation of some of the steam settles into parts of the pipes or in other parts of the steam-heating apparatus whenever opportunity for the formation of this offers, and when enough of it gathers it shuts off the flow of the steam. Then the steam gathers head against it, until able to push the water along partly out of its way, and a great bubble of steam rushes past into the pipe beyond, making the pipe vibrate as if struck on the outside with a hammer. The moment the bubble of steam passes, the pressure

behind the water is reduced and the water runs back again closing the passageway. Another bubble of steam is soon forced past and then another, and this process continues until the steam heats the pipes enough to stop the rapid condensation which first formed the obstructing pool and also evaporate and dissipate the pool itself. In particular cases a second and perhaps a third pool will form in the same place before the pipes get hot enough to stop action. In these cases the pounding continues for a time, then stops, then begins, stops, and then pounds again before the final stoppage. There are many causes of these collections of water, but the most pro-

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

lific one is an improper alignment of the steam pipes, by which there is left between the boiler and the radiators a sag in the pipe. In order to get heat from the steam, the steam must circulate through the pipes to the radiators and then return to the boiler in the form either of wet steam or water. Any spot in the whole system where the water can lodge will obstruct this circulation and cause a pounding.

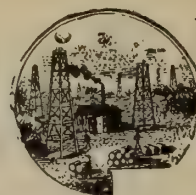
Where pipes are carried along laterally they should by preference have a slight rise along their whole course from the boiler and should never be allowed to get into a reverse position. They are often set wrong at first, but even if this were not done the settling of the building frequently causes a trap in them.

Other traps are found at times in globe valves where the steam has to dive down under a diaphragm to get through the valve. This can be remedied by changing the position of the valve so that it stands at an angle of about 45 degrees from the vertical, instead of straight up. In other cases the radiators are not level, and the water gathers in them and makes a trap. In a single steam pipe system, where the steam is fed in and the water returns by one pipe and valve this has been found to be caused in a number of cases by a lack of provision for the elongation of the pipes when they were heated. This expansion of the pipes will lift the end of the radiator where the pipe is attached, and make a trap at the other end.

In double pipe systems a radiator may be set to thumping by having the steam partly turned on while the return valve is closed, or by a leaky valve letting a little steam into the radiator while it is supposed to be out of use. Even in well set up systems, where there is a decided drop-back to the pipes, toward the boiler, all through their course, a great thumping may result from suddenly turning a full head of steam into cold pipes and radiators. Under these circumstances so much water will be turned into the cold pipes that it will block a part of the lever portions of the pipe and make a great rumpus before it can get back to the boiler and leave the pipes clear again. The remedy for this is simple: Don't turn on the steam so rapidly.

AUTOMATIC GAS EXTINGUISHER.

An English firm has placed upon the market a patent apparatus for automatically extinguishing gas or electric lights at a given time without the aid of watchman or caretaker. The arrangement is such that by the combined action of a clock, levers, chains and trigger the gas is turned off, or electricity switched off, just as easily as setting an ordinary alarm clock. For window-lighting, or in places where lights should be turned out at a certain hour, the apparatus offers an easy method for doing it, the only labor necessary being the winding up of the clock and attaching a lever to the trigger. From the moment the apparatus is set the rest of the duty is performed automatically, and a whole series of lights can be extinguished at the same moment. The firm is putting this apparatus in buildings at a cost of from about 52 to 63 shillings.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for...

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—

Toronto Fence and Ornamental Iron Works
(Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.

WESTERN

Incorporated
1861.

ASSURANCE COMPANY

Fire and Marine

Capital, subscribed \$2,000,000.00

Capital - - - 1,000,000.00

Assets, over - - 2,320,000.00

Annual Income - 2,300,000.00

Head Office: TORONTO, ONT.

Hon. Geo. A. Cox, President. J. J. Kenny, Vice-President
C. C. Foster, Secretary.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

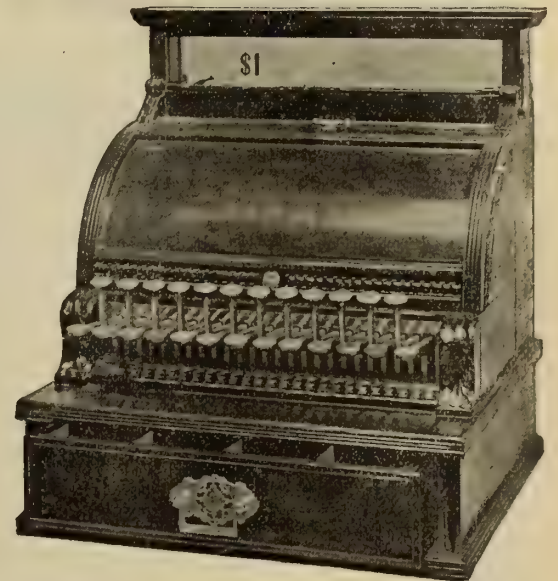
The Counterfeit is Not so Good as the Original, and Costs More.

Buy only National Cash Registers—they are the best—and do not pay over \$70 for good detail adders. If you want the latest forms, buy a total adder, or a total-adding check and detail printer.

WHAT DO YOU THINK OF THESE PRICES?



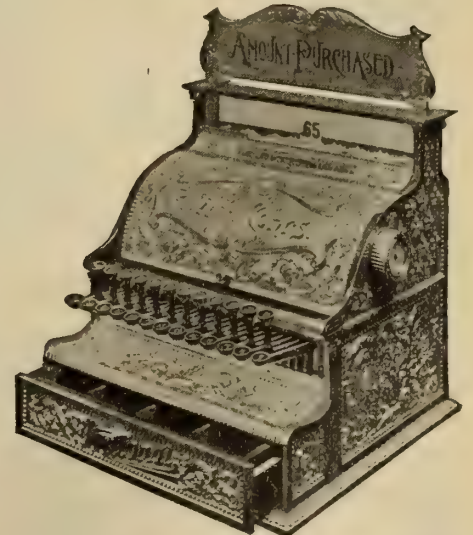
No. 17 Detail-Printing National Cash Register.
Price \$15.



No. 18 Detail-Adding National Cash Register.
Price \$25.



No. 301 1-2 Detail-Adding National Cash Register.
Price \$50.



No. 322 Detail-Adding National Cash Register.
Price \$70.

We make ninety kinds and sizes of cash registers, ranging in price from \$15 to \$350. Samples can be seen at any of the offices of The National Cash Register Company—6 Rossin Block, West King Street, Toronto, Ont.; 1685 Notre Dame Street, Montreal, P. Q.; Winnipeg, Manitoba; and Vancouver, B. C.

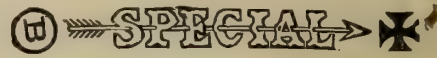


WADE & BUTCHER,
SHEFFIELD, ENGLAND.

OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

JAMES HUTTON & CO., Agents, - - - Montreal

CURRENT MARKET QUOTATIONS

TORONTO, Nov. 19, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—		
56 and 28 lb. ingots, per lb.	0 16	0 16½
Straits	0 16	0 16½

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley.	Per box.	
I.C., usual sizes	\$5 00	
I.X.	6 25	
I.X.X.	7 50	

J. R. & Co.—

I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Famous—

I.C.	5 00	
I.X.	6 25	
I.X.X.	7 50	

Raven & P. D. Grades—

I.C., usual sizes	3 50	
I.X.	4 25	
I.X.X.	5 00	
I.X.X.X.	5 75	
D.C., 12½x17	3 00	
D.X.	3 75	
D.X.X.	5 75	

NOTE.—Other brands might be shaded by 5¢ per box.

Coke Plates—Bright.

Hessemer Steel—		
I.C., usual sizes	3 00	
I.C., special sizes, base... ..	3 15	
20x28	6 25	

Charcoal Plates—Terne.

Dean or J. G. Grade—		
I.C., 20x28, 112 sheets	6 00	
I.X., Terne Tin	7 50	
I.X., Orion	7 50	

Charcoal Tin Boiler Plates.

Cookley Grade—		
X.X., 14x56, 50 sheet bxs }	0 05½	0 06
" 14x60, " }		
" 14x65, " }		

Tinned Sheets.

72x30 up to 24 gauge	0 06	0 06
26	0 06½	
28	0 07½	0 07½

Iron and Steel.

Common Bar, per 100 lbs	1 50	1 55
Refined "	1 55	1 55
Horse Shoe "	1 80	1 80
Band "	1 75	1 75
Hoop "	2 00	2 00
Swedish "	4 00	4 25
Sleigh Shoe Steel "	2 50	2 50
Tire Steel	2 50	2 50
Machinery	2 75	3 00
Cast Steel, per lb	0 10	0 10
Russian Sheet, per lb	0 10½	0 11
Tank Plates, 1-5 and thicker ..	2 00	2 25
Boiler Rivets	4 50	5 00

Boiler Tubes.

1½-inch	0 06½	
2 "	0 07½	
2½ "	0 09½	
3 "	0 11	

Steel Boiler Plate.

3-16 inch	2 00	
"	1 90	

¾ inch and thicker

Sheet Iron.

16 gauge and heavier	2 50	2 70
18 to 20 gauge	2 25	2 50
22 to 24 "	2 25	2 35
26 "	2 35	2 45
28 "	2 45	2 55

Canada Plates.

All dull, 52 sheets	2 25	
Half polished	2 30	
All bright	2 90	

Iron Pipe.

Wrought, ¼ to ¾ inch, \$1.87; ½ inch, \$2.35; ¾ inch, \$2.87; 1 inch, \$3.87; 1¼ inch, \$3.10; 1½ inch, \$6.38; 2 inch, \$9.25 per 100 feet.		
Galvanized, ½ inch \$4 to \$4.25, ¾ inch \$4.80 to \$5, 1 inch \$6.75 to \$7, 1¼ inch \$9.25 to \$9.62½, 1½ inch \$11.75 to \$12.25 per 100 feet.		

Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:		
Per lb.		
16 gauge	0 03½	
18 to 24 gauge	0 03½	
26 "	0 04½	
28 "	0 04½	

Chain.

Proof Coil, 3-16 in., per 100 lbs ..	5 50	6 00
" ¼ " " " ..	4 75	
" ½ " " " ..	4 00	
" ¾ " " " ..	3 75	
" 1 " " " ..	3 35	
" 1½ " " " ..	3 25	
" 2 " " " ..	2 95	
" 2½ " " " ..	2 85	
" 3 " " " ..	2 75	
Trace, per doz. pairs	3 60	5 90
German coil, per 100 ft.	1 65	2 70

Jack chain, iron, single, per doz. yards.

Jack chain, double, per doz. yards.

Jack chain, brass, single, per doz. yards.

Copper.

English B. S., ton lots	0 11½	12
Lake Superior		

Bolt or Bar.

Cut lengths, round, ½ to ¾ in.	0 20	0 22
" round and square 1 to 2 inches	0 18	0 19

NOTE.—Complete lengths about 15 feet from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60	0 15	0 16
Untinned, 14 oz., and light, 16 oz., irregular sizes	0 15	0 16½

NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.

Planished and tinned, 14x48 and 14x60	0 25	0 27
---	------	------

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs., ea., per lb.	0 17	0 19
" 35 to 45 "	0 15½	0 16½
" 50 lb. and above, "	0 15	0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb	0 21	
Spun, per lb.	0 25	

Wire.

Pure in coils—		
From 1 to 20 gauge, 12½ p.c. off list.		
From 20 gauge up, 12½ p.c. off list.		

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p.c. off list.		
ets, hard-rolled, 2x4 ..	0 20	

Zinc Spelter.

Foreign, per lb	0 04½	0 05
Domestic "	0 03½	0 04

Zinc Sheet.

5 cwt. casks	0 05½	
Part casks	0 05½	

Lead.

Imported Pig, per lb	0 04	
Domestic, per lb	0 03½	
Bar, 1 lb.	0 04½	
Sheets, 2½ lbs. sq. ft., by roll.	0 04½	0 04½
Sheets, 3 to 6 lbs., per sq. ft., by roll.	0 04	0 04½

NOTE.—Cut sheets ½ cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 27½ per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7½ cents.

Solder.

Bar half-and-half	Per lb. Per	
Domestic	0 11	0 11½
Wire	0 10½	0 11
"	0 17	0 19

NOTE.—Prices of this graded according to quantity. The prices of other qualities of solder in the market indicated by private brands vary according to composition.

Antimony.

Cookson's, per lb	0 09	0 09½
Other makes, per lb.	0 08	0 08½

Anti-Friction Metal.

"Beaver" brand	\$0 20	
"Tandem" A	0 19	
" B	0 16	
" C	0 10½	

White Lead.

Pure, Assoc. guarantee, ground in oil, 25 lb. irons	Per cwt	
No. 1 do	5 50	
No. 2 do	5 22½	
No. 3 do	4 75	
No. 4 do	4 37	
Brandram's B. B. Genuine	4 04	
f.o.b. Halifax, St. John, Montreal, Toronto ..	7 50	
James' genuine	6 75	
" No. 1	6 70	
" No. 2	6 20	

Prepared Paints.

(In ¼, ½ and 1 gallon tins.)		
Pure, per gallon	1 00	
Second qualities, per gallon	0 90	
Barn (in bbls.)	0 70	
Sherwin-Williams	1 20	

Colors in Oil.

(25 lb. tins, Standard Quality.)		
Venetian Red, per lb	0 05	
Chrome Yellow	0 11	
Golden Ochre	0 08	
French	0 05	
Marine Black	0 09	
Green	0 08	
Chrome "	0 08	
French Imperial Green	0 19	

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe cwt	1 35	1 40
Yellow Ochre (F.L.S.), bbls. per cwt	2 75	
Yellow Ochre (Royal), per cwt	1 10	1 15
Venetian Red (best), per cwt.	1 80	1 90
English Oxides, per cwt.	3 00	3 25
American Oxides, per cwt ..	1 75	1 90
Canadian Oxides, per cwt.	1 75	1 90
Burnt Sienna, pure, per lb.	0 10	0 10
do. aw	0 09	0 09
Drop Black	0 08	0 08
Chrome Yellows, pure	0 18	
Chrome Greens, pure, per lb.	0 12	
Golden Ochre	0 03½	

Ultra marine Blue in 28-lb. boxes, per lb.

Fire Proof Mineral, per 100 lb.	1 00	
Genuine Eng. Litharge, per lb	0 07	
Mortar Color, per 100 lb.	1 25	
James' Gen. Red Lead, 100 lb	0 04½	0 04½
Pure Indian Red, No. 45, lb.	0 08	0 08
Whitog, per 100 lb.	0 50	

Paris Green.

Casks		
50-100 lb. kegs		
25-lb. Irons ..		
-lb. Boxes		

Sulphate of Copper.

Casks, for spraying, per lb.	0 04½	
100-lb. cases, do. per lb.	0 05	

Putty.

Bladder in bbls., per 100	1 75	
Bulk	1 65	
100-lb. cases (tins) per 100	2 00	

Varnishes.

Carriage, No. 1	per gal.	
Extra do.	1 50	
Body Varnish	2 50	
Furniture Varnish	4 50	
Extra do.	0 65	
Denar Varnish	1 60	
Hard Oil Finish	1 40	
Orange Shellac Varnish	2 00	
White Shellac	2 20	
Rubbing Varnish	2 50	
Polishing Varnish	2 50	

Linseed Oil.

Raw, per gal. net	0 42	0 43
Boiled, per gal. net	0 45	0 46
Outside points 2c. more than above figures.		

Turpentine.

1 to 4 barrels, net	0 48	
Outside points 2c. more.		

Castor Oil.

In cases, per lb	0 10	
Small lot	0 11	

Cod Oil, Etc

Cod Oil, per gal.	0 50	0 55
Pure Olive	1 20	
" Neatsfoot	90	

Glue.

(In bbls.)		
Common	0 07½	0 08
French Medal	0 10	0 10½
Cabinet, sheet	0 11	0 12
White, extra	0 16	0 18
Gelatin	0 22	0 30
Strip	0 16	0 18
Coopers	0 19	0 20
Al clear	0 09	

Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.		
B. B. Caps, Dom., 50 and 5 per cent.		
Rim Fire Pistol, dis. 45 p. c., Amer.		
Rim Fire Cartridges, Dom., 50 and 5 p. c.		
Rim Fire, Military, net list, Amer.		
Central Fire Pistol and Rifle, 18 per cent Amer.		
Central Fire Cartridges, pistol sizes, Dom. 30 per cent.		
Central Fire Cartridges, Sporting and Military, Dom. 15 and 5 per cent.		
Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.		
Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.		
Shot.		
Canadian, common, 12½ per cent.		
Brass Shot Shells, 55 and 10 per cent.		
Primers, Dom., 30 per cent.		

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.		Per lb
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10

Augers.		
Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	5 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.		
Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddler's, per gross.....	0 45	1 60

Awl Hafts.		
Patent Peg, oss.....	7 25	8 00
Sewing, per gross.....		

Awl and Tool Sets.		
Miller's Falls, per doz.....	2 80	3 30

AXES.		
Splitting Axes.....	5 25	5 50
Chopping Axes—		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50

Axle Grease.		
Per gross.....	6 00	13 00

Bath Tubs.		
Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount off revised list.		

Boxing extra		
Bells.		
Hand.		
Brass, 60 per cent.		
Nickel, 55 per cent.		

Door.		
Gon Sargent's.....	5 50	8
Peterboro', discount 50 per cent.		

Cow.		
American make, discount 66½ per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.		
American, each.....	1 25	3 00
House.....		
American, per lb.....	0 35	0 40

Bellows.		
Hand, per doz.....	3 35	4 75
Moulders', per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.		
Extra, 40 and 10 per cent.		
No. 1. leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.		
Per doz.....	5 00	6 00

Bits.		
Auger.		
Gilmour's, discount 65 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 65 to 65 and 5 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		

Car.		
Gilmour's, 47½ to 50 per cent.		

Expansive.		
Clark's, per cent.		
Excelsior, 10 per cent.		

Gimlet.		
Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.		
Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 12	1 20

Blind and Bed Staples.		
sizes, per lb.....	0 7½	0 12

Bolts.		
Carriage, dis., 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.		
Stove dis., 70 per cent.		
Elevator, dis., 35 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.		
Complete, with augers, each.....	5 00	7 50

Braces.		
Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Har's Falls.....	15 50	29 00

Brackets.		
Shelf.		
Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20

Broilers.		
Light, dis. 65 to 67½ per cent.		
Reversible, dis., 65 to 67½ per cent.		
Vegetable, per doz., dis. 37½ percent.		
Henis, No. 8.....	6 00	
Henis, No. 9.....	7 00	
Queen City.....	7 50	10 00

Butchers' Cleavers.		
From 8 to ch, per doz.....	4 23	

Butts.		
Brass.		
Wrought Brass, dis., 17½ p.c. revised list.		
Cast Iron.		
Loose Pin, dis. 70 per cent.		

Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65

Can Openers.		
Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50

Card.		
Horse, per do.....	0 60	1 00

Carpet Stretchers.		
American, per doz.....	1 00	50
Bullards, per doz.....	6 50	...

Carpet Sweepers.		
Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star, ".....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00

Cartridges.		
(See Ammunition.)		

Castors.		
Bed new list, dis. 55 to 57½ per cent.		
Plate, dis. 52½ to 57½ per cent.		

Cattle Leaders.		
Nos. 31 and 32, per gross.....	8 50	9 50

Cement.		
Canadian, Portland.....	2 50	
English.....	2 50	
Belgium.....	2 35	
Canadian hydraulic.....	1 10	
Figures are for barrel lots.		

Chalk.		
Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18

Chisels.		
Socket, Framing and Firmer.		
American, dis. 75 to 77½ per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00

Churns.		
Daisy or Leader, dis. from stock or factory		
60, 10 and 10 per cent.		
Steel, net.....	3 00	

Clamps.		
Judds', dis. 20 per cent.		
Stearns', per doz.....	3 00	10 00

Clips.		
Axle dis. 65 per cent.		

Coffee Mills.		
Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....	70	

Compasses, Dividers, Etc.		
American, dis. 62½ to 65 pe cent		

Cradles, Grain.		
Canadian dis. 25 per cent.		
Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.		
Torrey's Rod, per doz..... (15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00

Draw Knives.		
American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.		
Hand and Breast.		
Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.		
Morse, dis. 37½ to 40 per cent.		
Standard, dis. 50 and 5 to 55 per cent.		

ELBOWS.		
Stovepipe.		
Per doz.....	75	1 70

Enameline.		
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No. 4—3 dozen in case.....	\$4 75	
No. 6—3 dozen in case.....	7 50	

FAWCETS.		
Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star.....	2 60	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50

FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 30 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 p.c.		
Black Diamond, 50 and 10 to 60 per cent.		
Kearney & Foute, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 to 60 per cent.		
Heller's Horse Rasps, 50 per cent.		
Jovitt's, English list, 25 to 27½ per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.		
Each.....	0 60	2 00

FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		

FREEZERS		
Ice Cream.		
Gem from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.		
Henis, per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.		
Acme, dis. 65 to 67½ per cent.		

GAUGES.		
Marking, Mortise, Etc.		
Stanley's, dis. 50 to 55 per cent.		

Wire Gauges.		
Winn's, Nos. 25 to 33, each.....	1 65	2 40

GLASS.		
Window.		
Box Price.		

Star.		
Double Diamond.		
Under 25.....	1 35	2 60
26 to 40.....	1 50	2 90
41 to 50.....	3 30	4 80
51 to 60.....	3 60	5 50
61 to 70.....	3 90	6 35
71 to 80.....	4 30	6 90
81 to 85.....	4 85	7 70
86 to 90.....	9 10	
91 to 95.....	9 90	
96 to 100.....	11 50	
101 to 105.....	13 50	
106 to 110.....	15 75	

GLUE POTS.		
Tinned, each.....	0 30	
Enamelled each.....	0 55	

GRINDSTONE FIXTURES		
P. S. & W., per doz.....	3 60	4 00

HAMMERS.		
Nail		
Maydole's, dis. 5 to 10 per cent. Can., dis. 25 to 27½ per cent.		
Tack.		
Magnetic, per doz.....	1 10	1 20
Sledge.		
Canadian, per lb.....	0 07½	0 08½
Ball Pean.		
English and Can., per lb.....	0 22	0 25

HANDLES.		
Axe, per doz., net,	50	2 00
Store door, per doz	1 00	1
Chest, per doz. pairs.....	0 40	2 50

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50
 Cabinet,
 Eagle, dis. 30 p.c.

PADLOCK.

English and Am., per doz. 0 50 6 00
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.
 Flat head, discount 25 p.c.
 Round Head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 18
 Myst c Metal, " 08
 F. O. B. New York or Chicago.

MALLET.

Tinsmiths', per doz. 1 25 1 50
 Carpenters', hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent., 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton, London.
 Cut Nails (Steel). Add 10c. to the prices in list for iron nails.
 Wire Nails, basis, \$2 per keg Toronto. For places outside factory points, \$1.9 f.o.b. Montreal. Carload lots, 5c. per keg less than ab ve figures.
 Brads and finishing nails, special sizes, 80 p.c. from new list.

NAIL PULLERS.

German and American. 1 85 50

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00
 Diamond 12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
 Carbon safety " 0 18 0 00
 Canada w. f. " 0 00 0 21
 American w. f. " 0 00 0 22
 Pratt's Astial. 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50
 Zinc and tin, dis. 50, 50 and 10.
 Copper, per doz. 1 25 3 50
 Brass, " 1 50 3 50
 Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25
 " Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00
 Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis Mfrs., Bridgeport, Conn.
 No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00
 No. 38 Hand Machine, range 1½ to 4 " 100 00
 No. 56 Hand Machine, range 2½ to 6 " 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.
 Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 per cent.
 Miscellaneous, dis. 25 to 27½ per cent.
 Bailey's Victor, 25 per cent.

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.
 Button's Imitation, per doz. 5 00 9 00
 German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

S. R. & L. Co., dis. 70 and 10 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00
 Axle " 0 22 0 33
 Screw " 0 27 1 00
 Awning. 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.
 Pitcher spout, 70 to 70 and 5 p.c.
 Canadian cistern, 60 p.c.
 Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85
 Conductors', " 9 00 15 00
 Tinnery's solid, per set. 0 00 0 72
 " hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½
 Tins, lbs. 2 50 2 75

RAIL.

Barn door, per foot. 0 02½ 0 02½
 Sliding door, " 0 03½ 0 03½
 Lanes, " 0 02½ 0 02½

RAKES.

Cast steel and malleable Canadian, list dis 60 to 60 and 10 p.c. revised list.
 Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00
 Boker's, " 7 50 11 00
 Wade & Butcher's, " 3 60 10 00
 Arbuz's, " 9 00 18 00
 Theile & Quack's, " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days
 Carriage. Section, Wagon Box Rivets, etc., (Steel), 65 p.c.
 Carriage. Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.
 Black M. Rivets (Steel), 65 p.c.
 Black M. Rivets (Norway Iron) 60 p.c.
 Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. in ½-lb. boxes and cartons, 1c. per lb. extra, net.
 Burrs, iron or steel, 55 and 5 per cent.
 Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian dis. 35 to 37½ per cent.

ROPE.

	Sisal.	Manilla
7-16 in. and larger, per lb.	6¼	00 7½
¾ in. " "	6¾	00 7½
½ and 5-16 in. " "	7¼	00 8½
Cotton " "		15 17
Russia Deep Sea " "		00 13
Jute " "		6¾ 7½

RULES.

Boxwood, dis. 80 and 10 p.c.

Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.
 S. & D., 40 to 40 and 10 per cent.
 Emery, per quire. 0 60 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.
 Kempshell's, dis. 40, 62½ per cent.
 Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50

SAWS.

Crosscut, McMillan & Haynes, per dozen. 0 40 0 70
 "Empire," McMillan & Haynes, per ft. 0 00 0 70
 Hand, Diston's, dis. 12½ to 15 p.c.
 S. & D., 40 to 40 and 10 per cent.
 Crosscut, Diston's, per ft. 0 35 0 55
 S. & D., dis. 35 p.c. on Nos. 2 and 3.
 Hack, complete, each. 0 75 2 75
 frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 0 00 7 50
 Whiting " 6 87 7 00

SCALES.

Gurney Scales, 50 p.c.
 B. S. & M. Scales, 50 p.c.
 Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50
 Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 2 20 4 50
 Door, per doz. 7 10

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.
 Wood, R. H., " dis. 80 and 10 p.c.
 " F. H., brass, dis. 82½ and 10 p.c.
 " R. H., " dis. 75 and 10 p.c.
 Drive Screws, 87½ and 10 per cent.
 Bench, wood, per doz. 3 25 4 00
 " iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.
 B. & W., N.P., dis. 65 p.c.
 Seymour's, dis. 60 p.c.
 Etna, dis. 75 to 75 and 10 p.c.
 Heinisch, dis. 60 p.c.
 Bristol, japanned, 80 p.c.
 N.P., dis. 70 p.c.
 Clauss, full nickel, 60 p.c.
 " japanned handles, 67½ p.c. off.
 Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10
 " tinned, " 1 25 1 35
 Tin rim, per doz. 2 30 2 45
 " black. 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.
 Acme " 3 00 5 00
 Lock, Andrews'. 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 30 to 35 per cent.

SPOKE SHAVES.

Wood, English 1 8 5 00
 " ron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross	7 50	12 00
Dessert, " "	21 00	00 00
Table, " "	30 00	30 00
Desert Forks, " "	24 00	00 00
Medium " "	27 00	00 00
Table " "	36 00	00 00

SQUARES.

Iron, per doz. 1 65 2 90
 Steel, dis. 70 per cent. revised list.
 Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized, " 2 50
 Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb.	0 28	0 60
Hindostan, " "	0 06	0 07
slips, per lb.	0 09	0 09
Labrador, " "	0 00	0 13
Axe, " "	0 00	0 15
Arkansas, " "	0 00	0 50
Water-of-Ayr " "	0 00	0 10
Scythe, per gross.	3 50	5 00
Grind. per ton.	15 00	18 00

TACKS, BRADS, ETC.

Cheese-box tacks, blue, 80 p.c.
 Trunk tacks, black, 80 p.c.
 " tinned, 80 p.c.
 B.B.B. iron carpet, blued. 80
 " tinned. 80
 B.B.B. iron carpet, bright or blued (in kegs) 40
 B.B.B. iron carpet, tinned (in kegs). 45
 " " ¼ weights. 40
 Sweden, cut tacks, genuine, blued and tinned, 75 and 10
 Sweden, upholstery, blued and tinned. 80
 " lace " 75
 " brush " 50
 " gimp, blued, tinned & japan'd
 Zinc tacks. ½
 Copper tacks. ½

Leather carpet tacks. 65
 Trunk nails, black and tinned. 70
 Clout nails. 66½
 Cigar box nails. 45
 Lining nails in papers. 10
 " " in bulk. 15
 " solid heads, in bulk. 60
 Saddle nails in papers. 11
 " in bulk. 15
 Tinned capped trunk nails. 15
 Double pointed tacks. discount 90 and 25 p.c.

TAPE LINES.

English, ass skin, per doz. 2 75 5 00
 English, Patent Leather. 5 50 9 75
 Chesterman's, each. 0 90 2 85
 " steel, each. 0 80 8 00

THERMOMETERS.

Tin case and dairy, dis. 75 to 75 and 10 p.c.

THIMBLES.

Asbestos, filled, per doz., 35 to 40 p.c.

TIES.

Cow, per doz. 1 25 2 00

TINNERS' TOOLS.

P. S. & W., 10 p.c.
 Canadian, 35 to 37½ per cent.

TINWARE.

Stamped, dis. Assn. list, 80 per cent
 Japanned, prices on application
 Pieced, prices on application.

CALKS (Steel)

Toe calks, per M. net. \$3 85
 Heel calks, " " 4 10
 Discounts, for 10 boxes at oneshipment 10 per cent.

TRANSOM LITERS.

Payson's, per doz. 2 60

TRAPS. (Steel.)

Game, Newhouse, dis. 40 p.c.
 Game, H. & N., P. S. & W., 65 p.c.
 Game, steel, 72½ p.c.
 Mouse, per doz. 0 35 1 50
 Rat, per doz. 1 40 6 50

TROWELS.

Diston's, discount 10 per cent.
 German, per doz. 4 75 6 00
 Brads. 5 00 10 50
 S. & D., discount 35 per cent.

TRIERS.

Butter, per doz. 6 25 9 00

TWINES.

Bag, Russian, per lb. " "
 Wrapping, mottled, per pack. 0 50
 Wrapping, cotton, per lb. 0 17
 Mattress, per lb. 0 33
 Staging, " 0 27
 Broom, " 0 30

VISES.

Hand, per doz. 4 00 6 00
 Bench, parallel, each. 2 00 4 50
 Coach, " 6 00 7 00
 Peter Wright's, per b. 0 12 0 13
 Pipe, each. 5 50 9 00
 Saw, per doz. 6 50 13

WASHER CUTTERS.

Per doz. 4 00
 Washers "Iron," 40 per cent., 4 months per cent.

WELL WHEELS.

Amer., per doz., 8, 10 and 12 inch. 3 38

WIRE.

Brass Wire, 16 to 25 wire gauge, 12½ p.c.
 Copper Wire, 12½ p.c. rev. list discount.
 Annealed, annealed and oiled, galvanized small lots, 30 per cent. discount off vice list.
 [In lots of 1,000 lbs., 35 per cent. discount annealed oiled, and annealed and galvanized, freight will be prepaid when exceeding minimum rate of 20c. per lbs.]

Bright, coppered steel and spring, 30 to 30 in 5 p.c. revised list, f.o.b. Montreal, Toronto or Hamilton.
 Broom Wire, per lb. 0 05½ 0 06
 Clothes Line Wire, 19 gauge, per 1,000 feet. 2 75 3 00

WIRE FENCING.

Galvanized, 2 barb, 2½ and 5 inches apart. Small lots. 2 30
 Galvanized, 4 barb, 4 and 6 inches apart. 2 30
 Galvanized, plain twist, all deliv'd. 2 30
 Plain twist. 2 30
 Terms, 60 days, or 2 per cent. in 90 days

WIRE CLOTH.

Ordinary, discount 25 per cent.
 Painted Screen, per 100 sq. ft. 1 35

WRENCHES.

Acme, 35 to 37½ per cent.
 Agricultural, 70 and 10 per cent.
 Standard, dis. 60, 80 and 100 per cent
 Coe's Genuine, dis. 30 to 32½ p.c.
 Diamond, dis. 33½ to 35 per cent

PEARSON'S PATENT

Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2 1/2 to 48 inches.

The Montreal Roofing Co.

Sole Manufacturers for the Dominion, Montreal

CHARLES F. CLARK,
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ESTABLISHED 1849.

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Going to Retire? Want to Sell Out?

If so, say so in **HARDWARE AND METAL**. It reaches the most likely buyers. Two cents a word each insertion.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,
Managing Director and Treasurer

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Hardware and Metal, Toronto

E. T. WRIGHT & CO.

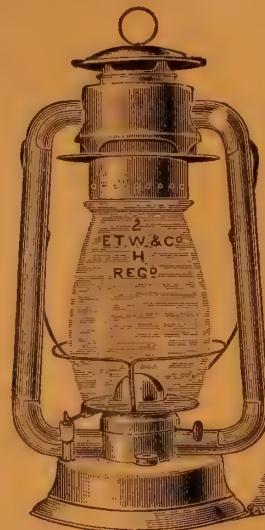
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of

Tubular and
Cold Blast
Lanterns

Bird Cages
Mouse Traps
Flour Sifters

Stamped
Re-tinned
and Japanned

..TINWARE



HAMILTON - CANADA.

The Hamilton Blast Furnace Co., Ltd.

HAMILTON,
Canada.

Manufacturers of

HIGH GRADE PIG IRON.



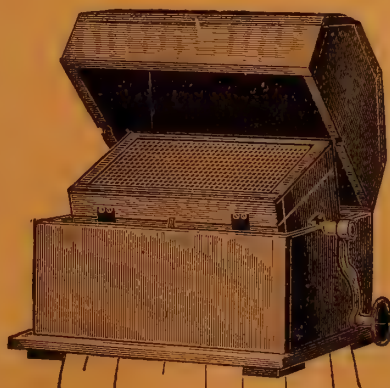
Now is the time

to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.



Manufactured
by . . .

MEAKINS & CO. - MONTREAL

E. t. 1863

Inc. 1895

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

Awarded

By **JURORS** at

International Expositions
Special Prize

Gold Medal at Atlanta, 1895

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WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE CUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

DON'T FAIL



to write us when your stock of paint is getting low. It will not pay you to be without a full line of our Paints, Oils or Varnishes, as you must know from experience.

Remember that we make Enamels just as well as we make Paints, and that is saying a good deal, isn't it?

The JAMES ROBERTSON CO. Limited 263-285 King Street West, **Toronto**

Telephones 819, 1511 and 1292.

THE PAINT MAKERS

Copper, Tin, Antimony, etc.
Langwell's Babbit, Montreal.

CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, NOVEMBER 27, 1897

No. 48



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

Beware of Fraudulent Imitations.

MAGNOLIA METAL COMPANY

LONDON OFFICE—40 Queen Victoria St.
CHICAGO OFFICE—Traders' Building.
MONTREAL OFFICE—

Caverhill, Learmont & Co.
General Dominion Agents.

Owners and Sole Manufacturers,

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MONTREAL

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"Safford" PATENT Radiators

For Hot Water and Steam **HEATING**

Made from Canadian Materials
By Canadian Capital
With Canadian Brains
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Positively the only Heaters made without Bolts or Packing

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TORONTO RADIATOR MFG. CO Limited
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SKATES
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Anything in....

Copper

THE range of our product is from the smallest article possible to make to the largest work ever used or required.

COPPER WORK

made to any desired specification or design.



We have always on hand a large stock of

Sheet Copper and Copper Tubing

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Keep a Little Ahead of the Others

The Slick Can will Help You.

A Perfect Can at
a low price.

NO OIL SPILLED
NO SOILED CLOTHES
NO DIRTY LAMP

Are you ready for the Fall
Trade in this line?



Patented 1896

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BERTRAM, WILSON & CO.

SPECIAL PRICES ON

TOOL STEEL

DRILL STEEL

PICKS

MATTOCKS

CROW BARS

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FILES and SAWS

IRON, STEEL
HARDWARE and BICYCLE
MERCHANTS

53 Yonge St.
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TRADE



MARK

It is a well known
fact . . .

that no other goods are as carefully
made and inspected as

TRADE



MARK

Henry Boker's Hardware Cutlery, etc.

Buy his goods Take no other
and you will capture the cream of the trade.

BEST ASSORTMENT ALWAYS ON HAND.

TRADE

TRADE



MARK

Rice Lewis & Son

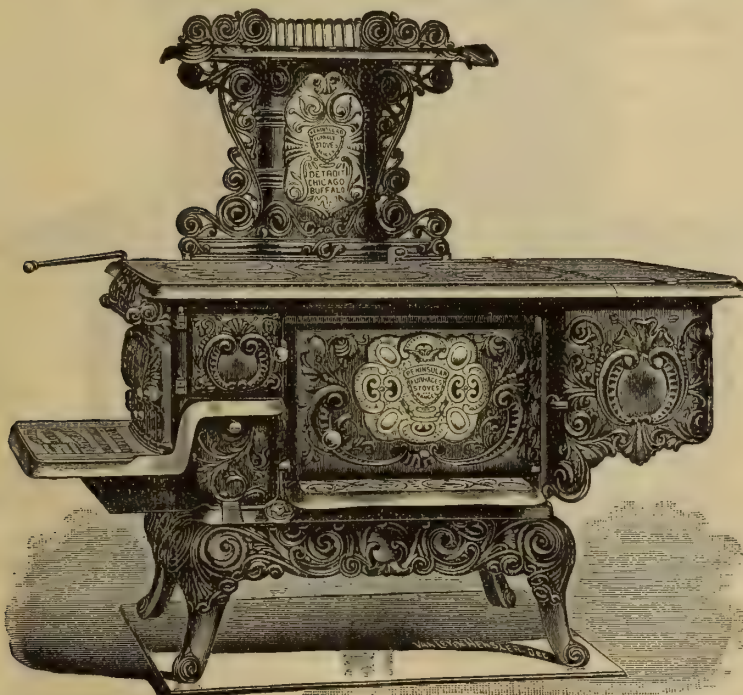
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TORONTO



MARK

NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new
goods with same dress as the Granite
Range, which is acknowledged to be the
prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO.

PRESTON, ONT.

ALWAYS COLD.

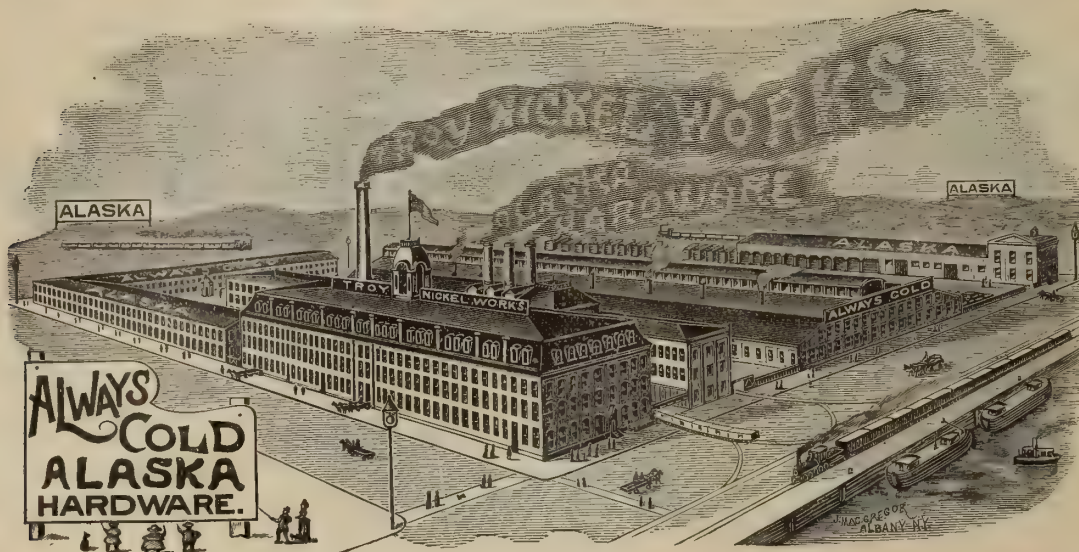
Lid Lifters
Pipe Dampers
Fire Setts

ALASKA

Stove Trimming

ALWAYS COLD.

Pokers, Shovels
Damper Attachments
Etc, Etc.



To Canadian Trade

If your Jobbers don't carry this line
send to us for prices. We will land
the goods at your door. WRITE US
ANYWAY for Catalogue.



TROY NICKEL WORKS, Albany, N.Y.

STOVE PERFECTION!

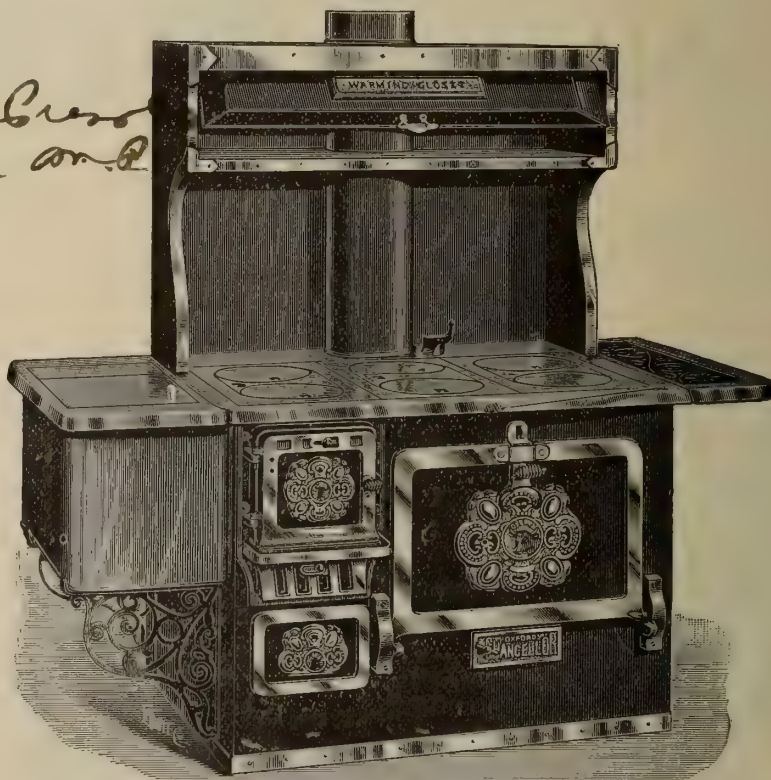
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*The Bryan Bros
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Oxford . . .
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Is an ideal wood range handsomely made of
heavy steel plate—warranted to last a life time. It
burns the coarsest wood, has a strong fire box, large
fire door, oven 24 x 22 x 15 with balanced drop door
—quick working and perfectly ventilated.

Your stock is not complete without the Chan-
cellor. It sell on sight—the price is moderate and
every range guaranteed.



The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.



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Fine Magazine Printers

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John Cameron, General Subscription Agent.

Major A. G. Campbell, General Subscription Agent.

**WHEN WRITING ADVERTISERS
PLEASE MENTION THAT YOU SAW
THEIR ADVERTISEMENT IN THIS PAPER**

ALLOWING TRADE TO SLIP.

ONE cannot walk about the streets of any city or large town in Canada without being reminded again and again of the fact that hardwaremen have allowed to slip from them many lines upon which business men in other branches of trade are now reaping fair to good profits.

It is quite true this peculiarity is not confined to hardware merchants in Canada. Indeed, an English manufacturer, who was in Toronto recently, assured **HARDWARE AND METAL** that those in his country were also sinners in this respect.

Fortunately, hardware merchants, wholesale as well as retail, are recognizing that they have not been as zealous as they might have been for the interests of their particular trade; and with this awakening has come a desire to remedy matters.

Bicycles, an undoubted hardware line, were handled by nearly everyone before the hardware dealer had the courage to

take them up. And although hardwaremen stepped in when competition was the keenest and profits consequently the smallest, yet the most of them have found the venture a good one.

The trade in gas and oil stoves has also been drifting away from its proper anchorage, but it, too, is gradually being worked back to where it belongs.

In the cutlery trade, everyone knows to what extent it has been cut into, and sporting goods are by no means sold as extensively by hardwaremen as they should be.

Brass goods, such as come within the range of cabinet and furnishing lines, should be more extensively carried by hardwaremen than they are. Most beautiful and useful goods, and withal goods astonishingly low in price, are to be had in abundance, and besides being a means of increasing profits lend attraction to the hardwareman's store.

The only thing in Canada that has not reason for thankfulness this Thanksgiving Day is the turkey.

THE CEMENT SCARCITY.

The situation in cement is anything but a pleasant one. A firm in Montreal advises a Toronto customer that it has had orders this month alone for more than 10,000 barrels in excess of the cargoes received.

It is asserted that on the Toronto market there is practically no imported cement, either English or German, and there is not a great quantity of Canadian cement to be had, either.

In consequence of the shortage of cement, work in Toronto upon permanent pavements, the basis of which is this article, is being delayed a great deal.

THE BASIS FOR RECIPROCITY.

THE statement made by the Premier since he returned from Washington, to the effect that there was no intention whatever of negotiating a reciprocity treaty with the United States which would affect Canada's preferential tariff on British goods, will doubtless assure a good many who were dubious as to where he was going to lead the country in the negotiations now pending.

Any other course would be unwise, to say nothing of its being dishonorable. Canada courted extended trade with the United States until she was black in the face, but she got a stone instead of bread for her pains. And now that Canada has in Great Britain a customer "to have and to hold," it would be short-sighted, indeed, to antagonize that customer by any species of double dealing whatsoever.

But there is no reason why Canada should not have closer trade relations with the United States without at all affecting our preferential relations with Great Britain, even if they come through the medium of a reciprocity treaty.

According to a statement made by the Premier the discussion at the recent conference in Washington was confined to the reciprocal abolition of the duties on coal, lumber, fish, hay, potatoes, barley, eggs and other similar articles. No matter to what extent trade between Canada and the United States developed in these articles it would have no effect upon the Canadian-British trade.

It will be interesting in this connection to notice the extent of the trade between Canada and the United States in the articles

enumerated by Sir Wilfrid Laurier as being the subject of reciprocity discussion. The following table gives the imports of the articles in 1896 into Canada from the United States :

IMPORTED FROM THE UNITED STATES.

Coal, bituminous	\$3,520,499
" anthracite.....	5,656,572
Logs and round manufactured timber..	286,683
Lumber and timber, n.e.s.	14,581
" " planks, boards, etc.	1,830,138
Fish	337,632
Hay	28,832
Potatoes	28,743
Barley	9,146
Eggs.....	35,090

\$11,747,916

The following table gives the exports of these same articles to the United States from Canada.

EXPORTS TO THE UNITED STATES.

Coal.....	\$3,145,419
Wood and manufactures of, not including household furniture.....	.....
Logs, all kinds.....	1,720,601
Deals, spruce and others.....	500,000
Planks and boards.....	7,041,074
Joists and scantling.....	270,425
Laths, paling and pickets.....	509,650
Staves and headings.....	604,912
Shingles.....	886,103
Sleepers and railroad ties.....	208,254
Stave bolts.....	34,672
Shooks.....	37,047
Wood for wood pulp.....	600,285
All other wood unmanufactured.....	662,570
Bark for tanning and firewood	399,319
Fish, and produce of.....	3,295,329
Hay.....	1,641,789
Potatoes.....	15,309
Barley.....	297,439
Eggs.....	97,313

\$18,825,091

It will be seen from the above tables that coal is the article which we purchase more of from the United States than we sell to that country, while our total purchases of the articles enumerated are valued at \$11,747,906, against our sales of \$18,825,091, or about 38 per cent. in favor of the latter.

The rates of duty in the two countries on the articles enumerated are :

	Canadian Tariff.	United States Tariff.
Coal, anthracite.....	Free.	Free.
Coal, bituminous (per ton 2,240 lbs.).....	60c.	67c.
Logs	Free.	Free.
Sawed boards, etc.....	25 p.c.	\$1 to \$2 m. ft.
Fish, packed in oil.....	2 to 5c. per box	1½c. per box to 40 p.c.
Herring, pickled or salted ...	½c. per lb.	½c. per lb.
Fish, fresh, smoked, etc.....	1c. per lb.	¾c. per lb.
Salmon, fresh.....	½c. per lb.	1c. per lb.
Salmon, pickled or salted....	1c. per lb.	1c. per lb.
Hay.....	\$2 per ton	\$4 per ton
Potatoes.....	15c. per bu.	25c. per bu.
Barley.....	30 p.c.	30 p.c.
Eggs	3c. per doz.	5c. per doz.

There are few people who are not ready to acknowledge that with the removal of

these duties benefit would be received by both countries.

Western Ontario requires United States coal. She can use no other, from the fact that distance is a greater obstacle to the use there of Nova Scotia coal than is the tariff. Nova Scotia coal never came farther west than Belleville, Ont., and that was, if we remember rightly, one cargo. Then just as it is natural that Ontario should use Pennsylvania coal, so it is about as natural that the New England and Pacific States should use respectively Nova Scotia and British Columbia coal.

Notwithstanding that the United States Congress has seen fit to put a duty of \$2 per thousand feet on Canadian pine, the people of the Eastern States are just about as much in need of Canadian lumber as the people of Ontario are in need of Pennsylvania coal. It may be quite true that, taking the country as a whole, Canada only supplies the United States with about 3½ per cent. of its total consumptive requirements, but a well-known authority has estimated that Canada supplies the State of New York and the New England States with at least 50 per cent. of their total requirements.

For hay and potatoes, the product of the Maritime Provinces, the New England States are the chief outlet. Then a market for Canadian eggs, which declined about \$400,000 in four or five years, would be worth again possessing.

No matter what may be done, it is unlikely that Canadian barley will ever again occupy the place it did in the United States, but unquestionably a good many brewers would again use it if the conditions before obtaining were restored. The year the McKinley tariff went into force Canada exported over \$4,500,000 worth of barley to the United States, against only \$297,439 last year, so there is quite a margin to work upon and still we may be a long way from being where we were in the years gone by.

By excluding manufactured articles from the proposed reciprocity tariff the parties to the recent conference have been wise, for manufacturers in both Canada and the United States would be certain to exert their influence against any reciprocal arrangement which tended to upset the present conditions as far as they are concerned.

CANADIAN ROAD HEADS THE LIST.

Railway earnings in Canada for the month of October were most remarkable in some respects, the increase in those of the C.P.R. being larger than those of any other railway system on the North American continent.

The earnings of this railway were \$2,784,000 against \$2,091,000 in October of 1896, an increase of \$693,000, or a little over 33 per cent. The next largest increase was \$197,000 behind the C.P.R., namely the Missouri Pacific system, its gain being \$496,000.

The earnings of the Grand Trunk increased \$17,704, the figures being \$2,359,461 against \$2,341,757 October of last year.

The earnings of the C.P.R. for the ten months of the year were \$19,180,330 against \$16,791,040 the same period last year, and those of the G.T.R. \$19,108,868 and \$18,811,769 respectively.

These figures require no comment.

GLASS STOCKS LIGHT.

The wholesale dealers in paints, oils, glass, etc., are not often caught napping, but the majority of houses were unprepared for the great briskness in the glass trade this fall.

It is generally considered that the demand for glass will continue good, and as but two or three Toronto houses laid in a good supply, these are chary about selling to jobbers, who find their stocks running low, expecting to find a sale for all their goods at job lot prices. For this reason one Toronto firm refused orders from Hamilton, London and Port Arthur for car-load lots.

Any glass imported from now till the opening of navigation will be subject to the high winter freight rates.

STAMPING BICYCLE FRAMES.

A remarkable invention is about to be placed on the market by a Birmingham bicycle firm which should further cheapen the price of wheels. It has been found possible to stamp out the whole of a bicycle frame. This is accomplished in two parts, from a sheet of steel, and the halves are then clamped together. A frame made from tubing which hitherto cost fifty shillings can be made by the new process for eight shillings. If this new invention should prove successful it will be a heavy blow to the tube manufacturers,

LOWER FREIGHT RATES.

MANY Canadian importers have a vivid and unpleasant recollection of the high through freight rates which have, as a rule, prevailed on goods shipped direct from European ports to points in Canada after the close of navigation.

Several who were unfortunate enough to have their late shipments miss the last direct steamer to Montreal found the difference so great that, as pointed out in this column at the time, all their margin of profit was wiped out. The advance was practically all made on this side; that is, on the haul from the Atlantic seaboard to point of destination.

This year the railway companies, having had a satisfactory year with their east-bound traffic, appear to have made up their minds to act more generously on their west-bound shipments from the Coast.

Take the rate on coil chain and similar goods as an instance. Last fall the importer had to pay a through rate of 38s. 6d., and they only received this quotation on car-load lots. This fall they are being quoted at much lower rates.

They can lay down less than a carload of

chain at 14s. 6d. less than last year, viz., 24s., while on a straight carload the saving is 18s. 6d. This is probably the greatest reduction in the scale, but on heavy steel also, instead of paying a rate of 27s. 6d., they are only assessed 21s. 6d.

The railway people are also more generous on material freighted from United States points. On material classified in the fourth class by the railway people, such as bar iron, machinery, steel and similar heavy goods, the rate from United States points is 21½c. this year, against 25c. last season.

Taken altogether, the carriers appear to be in a much more reasonable frame of mind this fall.

LARGE BICYCLE GEARS.

An impression seems to have gained ground among some riders that large gears require less propelling force. For example, it has been claimed that with 70 gear by using 25 and 10-tooth sprockets, about 25 per cent. less power is required than with the same gear produced by 20 and 8-tooth sprockets. This is absurd, as with a given gear no power can be created by any change in sprocket. The only points worthy of consideration in the question of large sprockets are the slight reduction to tension on the chain and the consequent reduction of friction on the bearings.

BUSY OUTLOOK FOR WIRE.

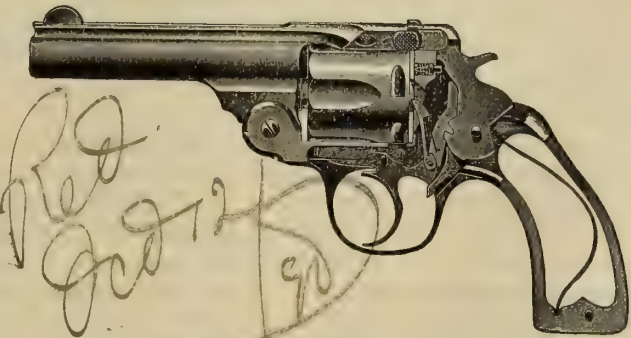
Mr. Henry B. Lupton, of Pittsburgh, secretary of the Oliver Wire Company, has been visiting the wholesale centres in Ontario and Quebec this week, in company with Mr. Leslie, of A. C. Leslie and Co., Montreal, their Canadian agents. Mr. Lupton reports that while the demand for wire is a little slack, as it always is at this season of the year, the coming season promises to be an uncommonly busy one at home, while the export trade, even apart from Canada, is now an immense factor with the American wire manufacturers, their product going largely to South America, South Africa and Australasia, and even to Great Britain and Ireland.

ADULTERATING LINSEED OIL.

Much trouble has lately been experienced in the United States through the adulteration of linseed oil. At a meeting of the National Paint, Oil and Varnish Association the matter was looked into and the fault found to be largely with dealers, who mixed with it an inferior oil. The crushers or manufacturers of the oil were found to send out the pure article. It was decided by the association to ask the Government to prohibit the sale of the adulterated article as pure oil, as this adulteration was doing much injury to the paint business.

THE ONLY WAY

to discharge an **Iver Johnson Automatic Revolver** is to **PULL THE TRIGGER**. As you will see by the cut, the hammer itself does not hit the firing pin which explodes the cartridge, but a small raiser is made to do this when the hammer strikes against it. The only way the hammer can strike this small piece is by pulling the trigger which brings the raiser into position; thus, the common accidents due to catching the hammer in the clothing, dropping the weapon, etc., are avoided.



Iver Johnson Automatic Hammer Revolver.

Send for Descriptive Catalogue.

N.B.--We make "Iver Johnson" Shotguns.

Iver Johnson's Arms and Cycle Works

. . . . Fitchburg, Mass.

THE FIRST THANKSGIVING IN AMERICA.

BY HENRY AUSTIN.

THE first Thanksgiving! This is a theme which even a flippant writer would perforce be compelled to approach with a feeling akin to reverence.

Even John Boyle O'Reilly, a man not born in the faith of our Pilgrim fathers, but representing an antagonistic creed, spoke always throughout his life with a certain enthusiasm in regard to this great original of a now historic and national ceremony.

For the festival of Thanksgiving to-day, though an American institution and a matter of proclamation on the part of the Administration, is a thing that goes deeper than its national significance, and finds its firm root, not merely in the affections and the customs of one people, but in that potent imagination everywhere that speaks the aspirations of mankind, and voices in no vague tones the triumph of common humanity.

To us individually Thanksgiving signifies a reunion of kinsfolk under the natal roof, at the hearthstone, which is the heartstone, and this reunion is for a joyous discussion of especially good cheer and a gentle re-welding of the old associations of consanguinity.

But to us collectively as a people Thanksgiving means more. It stands to-day for what it stood in that almost primeval wilderness, when the forlornly brave little band which came over on the Mayflower celebrated their gratitude to Him who had preserved them from the perils of the deep; when they performed the rights of hospitality to the savages whose minds had been inclined toward them in kindness; and when, furthermore, they gave shape and example to that spirit of co-operation and fraternal love which was destined to ripen in the following century into a republic broad-based on the rights of every man.

And now that we realize the wide significance in a historical way of the first Thanksgiving, let us understand it in detail and behold it in all the vitality of a picture as an event by itself.

The festival began about a year after the landing of the Pilgrims on Plymouth Rock, for it was on November 21, 1620, that the Mayflower with 102 Pilgrims cast anchor off Cape Cod.

Their voyage had taken about ten times the time which a crossing of the Atlantic now consumes, and the poem of Mrs. Hemans, that so many of us learned by heart in childhood, was no exaggeration of the storm and gloom which had companioned their flight across the sea and their landing where "the breaking waves dashed high."

The first half of their first year on the

roaring ocean edge of the wilderness had been a period of deaths, of haunting doubts, of constant hardships and of danger; though not danger in any large degree from the hostility of the natives, because it is a curious fact that the New England Indians were originally well-disposed toward the white men.

It is of record that, shortly after their first landing, one of their exploring parties received the sudden salute of a flight of arrows from ambush; but these arrows did not kill anybody, and evidently were intended solely as a salute, or to apprise the strangers of the presence of the owners of the land.

Friendly relations were established with the Indians at the start, and might have continued undisturbed had the Government of the colony been supremely single, instead of general, or had the subsequent additions to the colony been of equally high character and benevolent intent with the first comers.

Their Indian friends had taught the Pilgrims how to plant and fertilize corn, and it is interesting to note that for this fertilization the bones of shad and other fish that abounded along the coast were used.

The first year of the Pilgrim settlement, in spite of that awful first winter when nearly half of them perished, had therefore been comparatively successful. They had planted themselves well, and it is easy to understand why this fact should have appealed to the pious mind of their second governor, William Bradford, as an especial reason for proclaiming a season of thanksgiving.

The exact date of this first Thanksgiving, which also might be considered as in some sense a natural evolution from the old harvest festivals in England, is not certain; but from the fact that it was an open-air feast, it is evident that it must have occurred in that lovely period of balmy calm, cool air and soft sunshine, which is called Indian summer, and which may be considered to range between the latter week of October and the latter week of November.

Edward Winslow, whose name stands third as a signer to the original compact in the cabin of the Mayflower and who was thrice made governor, 1633, 1636 and 1644, writes an account of it, supposedly to one George Morton, under date of December 11, 1621. This account runs as follows:

"You shall understand that, in this little time that a few of us have been here, we have built seven dwelling houses and four for the use of the plantation and have made preparation for diverse others.

"We set the last spring some twenty acres of Indian corn and sowed some six

acres of barley and pease and, according to the manner of the Indians, we manured our ground with herrings, or, rather, shads, which we have in great abundance, and take with great ease at our doors.

"Our corn did prove well; and, God be praised, we had a good increase of Indian corn, and our barley indifferent good, but our pease not worth the gathering, for we feared they were too late down. They came up very well and blossomed; but the sun parched them in the blossom.

"Our harvest being gotten in, our governor sent four men on fowling, that so we might, after a special manner, rejoice together after we had gathered the fruit of our labors.

"They four in one day killed as many fowl as, with a little help beside, served the company almost a week, at which time, amongst other recreations, we exercised our arms, many of the Indians coming amongst us, and among the rest their greatest king, Massasoit, with some ninety men, whom for three days we entertained and feasted; and they went out and killed five deer, which they brought to the plantation and bestowed on our governor, and on the captain and the others.

"And, although it is not always so plentiful as it was at this time with us, yet, by the goodness of God, we are so far from want that we wish you partakers of our plenty."

Certes, from this frank, straightforward letter, the four men sent out as gunners, or fowlers, for this was the word used in that day, by Governor Bradford, were veritable Nimrods, men of mark as marksmen; or else the New England forest was more plentifully supplied with game than even the woods of Maine, New Hampshire and Vermont are to-day.

That they killed many wild turkeys, which the women, in dressing, probably stuffed with beech nuts, and that they brought home wood pigeons and partridges in abundance, is clear.

But it seems they must have lacked deer, since the Indian nobles in the train of King Massasoit volunteered to go out and bring in the venison.

The Indians, of course, knew the haunts of the deer better than the Pilgrim fowlers.

What a cheerful spectacle it must have been when their Indian guests reappeared carrying a many-branched buck, slung downward on a pole, or a pretty little doe, possibly hung across the stalwart shoulders of some giant red man who, in endurance and activity, could have easily eclipsed one of our modern professional athletes!

Shall one doubt that the Pilgrim gravity of demeanor was for a moment dispelled, when the Indians returned with their de-

licious contribution to the fraternal feast, and that a welcoming cheer arose from the throat of many of the deep-lunged Englishmen, or that the younger of the women may have clapped their hands and beamed upon their red brothers with smiling eyes of Saxon blue?

There was no prejudice then in English breasts against a man on account of the color God had given him. That feeling was to come later in some of the descendants of the English toward another dark-skinned race.

The men and women of the Mayflower met the copper-colored semi-savage as a man and brother on equal footing, though, of course, a pagan whose soul had to be saved.

And the religious exercises that accompanied every day of that first Thanksgiving season were doubtless intended to serve the double purpose of expressing their own gratitude to God and of impressing on the minds of the strangers in enjoyment of their hospitality the beauty and truth of a worship more suitable to the diversified human mind than the Indian's simple deism.

Between the feasting, in generous emulation, like the athletes of olden Greece or the knights in mediæval tournaments, many of the dusky suite of King Massasoit contended with the younger Pilgrims in various games and races or in feats of strength and agility. Perhaps Massasoit himself unbent from his kingly dignity to show how straight he could send an arrow at some improvised target. Maybe, some Puritan maiden, remembering her bowman ancestors at Hastings, laughingly tried her hand on an Indian bow.

Possibly, too, in the military drill and evolutions which Miles Standish, with his little regiment of twenty, went through, there was a sagacious intention on the part of that stout little warrior to give the Indians an idea what a formidable foe the white man might be, if provoked.

The feasting through those balmy days, and with such an army of unexpected guests, was doubtless mostly out in the open and the cooking done at huge fires.

Naturally, the deer, like the oxen of England at the old popular feasts, or like animals at our Southern barbecues, was in some cases roasted whole, though it is likely that, as they had barley flour, the cunning hands of the Puritan women composed some delicious venison pasties, and possibly some pies and puddings with wild fruit.

Fish, broiled to a rare brown turn; clams, roasted or stewed, and oysters, also brought in by the Indians and believed to be the first ever eaten by the Pilgrims, were likewise among the dainties.

Some "firewater," too, it is fair to infer,

Another Year

On the 1st November we began our third year in Canada. Encouraged by the progress and the success accomplished in the first two years we go into the third with great enthusiasm, and a strong determination to follow up and increase the advantages gained.

Our activity and push will be more widespread and vigorous than ever. The demand for

THE SHERWIN-WILLIAMS PAINTS that has sprung up all over this country will gather strength and grow as the good qualities of the goods become known. Our paints are their own best advertisement.

Every dealer who handles our goods derives the benefit of our methods, and has in his power the means of largely increasing his paint trade.

We not only **get** business, but where there's none, we **make** it. Our efforts are to make people paint—with **good** paint. When times are good—**then** is the time to sell paint.

If you want to sell more paint we can help you.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL

was passed about, for our Pilgrim fathers, there is abundant evidence to prove, though temperate, were not teetotalers.

Whether the Indians sat on settles at rude tables improvised for the occasion, or whether most of them stretched along the ground in the Roman fashion of dining, is a question for imagination to decide.

To their king, Massasoit, it is presumable that a seat of honor must have been offered, and it would be a satisfaction of the mind to know whether were present on this occasion his two sons, Metacom and Wamsutta, or Philip and Alexander, as they were afterward styled, who, in the unfraternal years to follow, fell victims to the cruelty and greed of the white man.

The eye of imagination beholds at this feast the Puritan women handing about to their guests bowls of delicious food with a grave and simple courtesy that must have made its impression on the Indian mind.

Perhaps the memory of their grace and graciousness lingered long. We know that, in the frightful wars that subsequently occurred, the New England Indians, as a rule, treated well the white women who fell into their hands. There is the testimony of Mrs. Rowlandson, that even when held in captivity by King Philip, who had the

deepest of reasons to hate the white man, she was always an object of most courteous consideration. The king even paid her a shilling for making a shirt for his little boy.

And the ear of imagination hears in that first season of Thanksgiving, along with the solemn music of the stern Pilgrim hymns, the ripple of feminine merriment and the deep laughter of the soldiers of Miles Standish.

And if Massasoit and his ninety men did not forget momentarily their racial gravity and join audibly in this laughter, it still must be believed that their hearts laughed and leaped in their bosoms and their dark eyes brightened in conviviality and friendship. That friendship, hallowed by Thanksgiving hospitality, continued unbroken, though occasionally disturbed, for about half a century.

Contrary to the line in Mrs. Hemans', for poetry abhors the exactness of history, every day there was heard "the roll of the stirring drum;" but it summoned not to battle, simply to prayer; and at every set of sun, again with prayer and song, the gratitude of all hearts was poured forth.

And one of the leading cooks of this wonderful woodland banquet was none other than Priscilla, whom Captain Standish made



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

the grand mistake of wooing through another man, instead of trying to take her heart like a true soldier, by storm, face to face.

She it was who presided over the largest kitchen, for some of the cooking of especial dishes was done inside.

What a picture is here for some historical painter: Priscilla at the fire or flitting through the throng outside with some dainty offering for Massasoit, while the eyes of all the younger men follow her footsteps!

And what a noble, inspiring picture is the whole scene—a picture of piety, of human brotherhood and of poetry, for which the universal heart of man, when realizing its profound significance, must gladly and proudly give thanks.

BRITISH CYCLES IN 1898.

THE IRONMONGER, London, England, recently issued circulars to the leading bicycle manufacturers in Great Britain, asking them the following questions:

1. Do you intend to alter your prices or discounts for the 1898 season? If so, please give concise details of the intended changes and the date of their coming into operation.
2. Shall you adhere to your former general style of construction? If any change, kindly describe its scope, object, etc.
3. Is it your opinion that any marked change is likely to be made, or that the chainless type is likely to be at all largely adopted?
4. Do you think the motor cycles are making any headway, or are likely to interfere with the sale of ordinary cycles?
5. What are your views respecting American or European competition next year? If you think this sort of competition is growing, please give your reasons.
6. Have you anything to suggest which would be of assistance to ironmongers in their cycle departments, or any view which you would like to express in relation to the sale of cycles by ironmongers?

Speaking editorially of the answers received The Ironmonger says: "Owing to the American invasion during the year which is now drawing near to its close, there has been an unsettled feeling on the question of selling-prices, and it has been very generally anticipated by the public that the British cycle manufacturers would find it either necessary or polite to reduce their own prices somewhat considerably for the

1898 season. The replies to the first of our queries completely dissipate this impression, and show that the prices of high-grade British cycles in 1898 are intended to remain pretty much as they have been in 1897. It is true that some of the large firms have not felt able to favor us with their views on this question, but we think it will be quite safe to assume that they are in line with those who have responded. It seems to be fairly well established also that the makers will adhere in all essentials to the same style of construction as hitherto, subject to various alterations and improvements in details.

"The general set of opinion is dead against the chainless machine, chiefly on mechanical grounds, thus confirming the results of the tests of British and American engineering experts, who have found that the friction of gearing is and must be much greater than that of the chain. At the same time, we shall probably see some chainless machines next season, if only because the riders want a novelty, without caring much what it is or how long it will endure. It is universally agreed by our correspondents that motor-cycles are moving ahead very slowly, and as universally stated that, in any event, they are not likely to interfere with the sale of ordinary cycles. Views on the subject of American and foreign competition are freely expressed, and, in substance, are to the effect that that competition is not in high-grade machines, and, so far as the United States are concerned, arises largely, even if not wholly, from the necessity of disposing of their surplus output at the best prices they can obtain. A few of the makers think the competition from the outside will be keen next year, and, on balance, we are rather disposed to agree with those who take this view."

The answers received in reply to question No. 6 were united in the belief that the ironmonger or hardware dealer is the proper man to be the agent for cycles, but that a separate department should be made for them, with a clerk who understood the mechanism of a wheel and who was able to make repairs.

BEVEL VS. CHAIN GEARS ON BICYCLES.

OWING to the great interest shown by the general public in the new chainless bicycle, questions are often asked relative to the bevel gear method of transmission as applied to bicycles. The chain is an old method of transmitting power and was used quite extensively by makers of machinery many years ago. It has been almost wholly superseded, however, in recent years by improved devices, especially by spur and bevel gearing, it being possible to produce by modern machinery cut gear teeth of the proper form for smooth running.

The chain, properly made, is an excellent drive, but on account of the number of joints and the elasticity of the parts of which it is constructed, it will not retain its original accuracy. It will become elongated, thus changing the pitch of the line, and, of course, it cannot fit the sprockets as correctly as it did at the beginning.

Should two bicycles, one chain the other chainless, be subjected to the same tests before leaving the factory, there is a possibility that the former, in some of the tests, would show a slight superiority; but take them back to the factory even after being run, say, 500 miles, and subject them to the same tests as those previously made, and it is thought the chainless would prove the superior. It must be borne in mind, however, that to obtain the best results from any chainless bicycle whose driving mechanism is bevel gearing, the tooth faces of the gears must have a perfect mathematical form, and it seems to be a necessity to have machinery which will cut them theoretically correct. It is also essential that the gears be attached at their respective bearings in the most positive manner and that the frames be rigidly constructed.

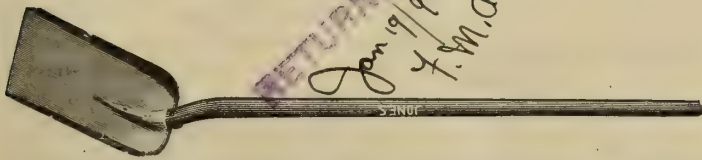
Regarding the wear, it is the general opinion that the gearing will wear longer than any of the other working parts of the bicycle, provided all the conditions indicated above have been attended to.

H. S. HOWLAND, SONS & CO.

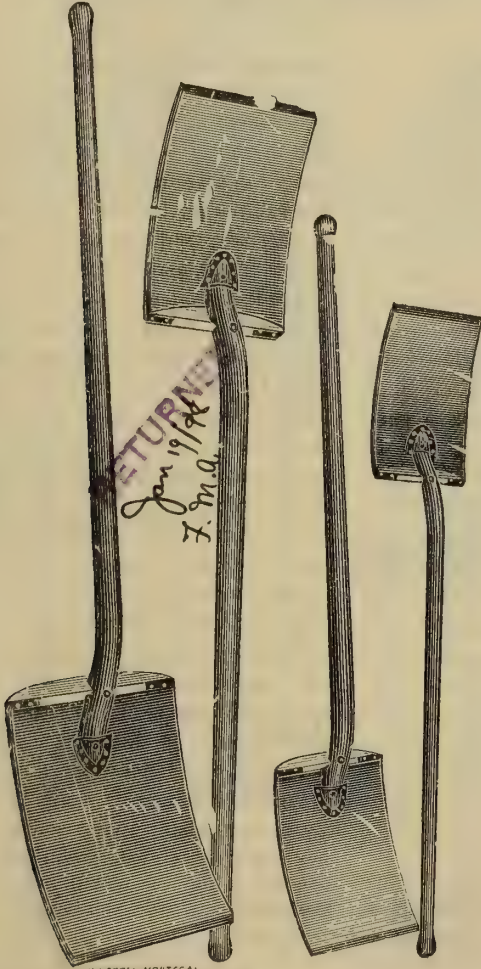
Wholesale Hardware
Merchants

37 West Front
Street, TORONTO

Snow Shovels



Steel. T. or L. Handles



Wood Snow Shovel—FAVORITE. All Sizes.

Felt Weather Strip

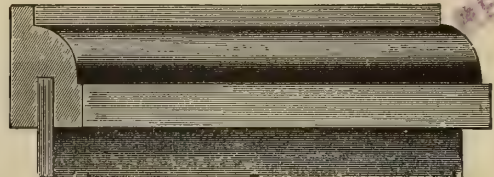
Excludes all Cold, Wind, Dust and Rain

No. 60



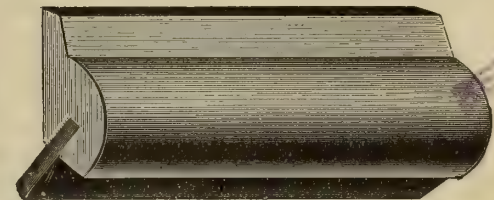
For Sides and Top of Windows

No. 61



For Sides of Windows and Doors

No. 62



For Centre of Windows

No. 64



For Bottom of Doors

GRAHAM Cut and Wire Nails are the Best.

H. S. HOWLAND, SONS & CO. - TORONTO

COST OF PRODUCING PIG IRON.

AN English journal has undertaken to make the following comparison of costs of making pig iron in Europe and in the United States.

Very few people appear to be aware of the great changes that have recently occurred in the costs involved in the manufacture of pig iron in different countries. It has hitherto been assumed, and to a large extent with reasonable accuracy, that Great Britain had facilities for the manufacture of cheap iron that existed nowhere else. Up to a year or two ago that was probably true. So far as Europe is concerned it still remains the case—at any rate, among countries that manufacture pig iron on a large scale. But the conditions that make for the economical production of iron are changing from year to year, and almost from month to month, and it is to be feared that many of these changes do not tend to improve the relative advantages and supremacy of our own country. Our three chief competitors in Europe are Germany, France and Belgium. We still produce pig iron more cheaply than any of them. But we do not produce iron so cheaply as is done, or should be done, under ordinary favorable conditions in the north of Spain, and we are a long way behind the facts and possibilities of the United States. The north of Spain has the great advantage of cheap ores almost on the spot; but it has to import most of its fuel from Great Britain. Recently, the development of a coal field in the Asturias has provided the Bilbao region with another source of coal supply, so that it appears to be probable that the cost of fuel will be lowered by-and-by. As it is, the statistics presented in the following tabular statement show that at Bilbao the cost of a ton of coke is about 21s., against 13s. 3d. at works in Cleveland and 14s. at works in Germany (Westphalia), while the Spanish cost of ore, assuming that the works possess their own mines in the locality—as some of them certainly do—is only about 12s. per ton of pig, against a present cost of 30s. for the same class of ore bought at current prices in Great Britain, and 32s. in Germany and Belgium. The cost of fuel in the United States is cheaper than in any European country, and in some cases at least within our knowledge does not exceed 6s. per ton of pig. On the other hand, Pittsburgh makers do not enjoy much advantage over our own so far as the cost of iron ores is concerned, owing to the greater distances over which the ores have to be transported. Speaking generally, the cost of producing a ton of Bessemer or hematite iron to-day will only amount to about 37s. 6d. at Pittsburgh, against 49s. 6d. in Great Britain (in the Cleveland district—

on the west coast the cost will be several shillings more), 52s. 3d. in Westphalia, 53s. in Belgium and 57s. 9d. in France. In making these estimates we have taken the cost-of labor at the furnaces at average rates in reasonably good practice. The details are appended:

Statement showing the estimated average cost of producing a ton of Bessemer pig iron in different countries, assuming current market rates and freights:

	Great Britain.	Germany.	France.	Spain.	United States.
	Cleveland.	Westphalia.	Loire.	Bilbao.	Pittsburgh.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Iron ores.....	1 10 0	1 12 0	1 18 0	0 12 0	1 7 6
Coke.....	0 13 3	0 14 0	0 13 6	1 1 0	0 6 0
Limestone...	0 2 0	0 1 6	0 1 6	0 1 6	0 1 6
Labor.....	0 2 9	0 3 0	0 3 3	0 3 9	0 2 6
Sundries.....	0 1 6	0 1 9	0 1 6	0 1 6	0 1 0
	2 9 6	2 12 3	2 17 9	1 19 9	1 17 6

These figures do not allow for depreciation and renewals—which are heavy in the iron industry—for petty charges, or for interest on investment; and when these are added it will be pretty evident that, at the present prices of raw materials, pig makers who have to purchase their supplies in the open market are hardly likely to make a good thing of it. On the other hand, it will be understood that most makers obtain their supplies under more or less special circumstances, such as contracts of old standing or the ownership and working of their own mines. It remains to be seen how far Spain and the United States may in the future push their natural advantages. Both countries have recently been exporting increasing quantities of pig iron, and it would not surprise us if much more were done in this direction.

SOLD OUT TO HIS SON.

John Zryd, who has for forty years been doing business in Hespeler, has sold out to his son, Oscar Zryd, who has taken in as partner J. E. Schmidt, formerly of Sebringville. The business will be continued under the same name and style of Zryd & Co., and as Hespeler is a thriving manufacturing town, the new firm should do well. Mr. Schmidt has for some years past been in business in Spokane, Washington Territory, and has also been interested in mining in the west.

TRADE CHAT.

MR. C. A. SCHOOLEY, machinist, Hincks street, yesterday got the contract for putting in a creamery plant at Yarmouth Centre for the Butter Manufacturing Association of that place. The factory is to be in operation by Dec. 1. Contract price, \$575. There were about half a dozen tenders put in for the job.—St. Thomas Times.

The bicycle rim factory at Clarksburg, Ont., has orders sufficient to keep a double force on nearly all winter.

In haste she tried to drive a nail,

But the next time she will linger;

And then perhaps she'll miss the one

That's growing on her finger.

The Assistant Commissioner of Crown Lands for Ontario states that never before has the Department received so many letters of inquiry about Ontario mining property. Many of these letters are from the United States and they state that those who send them write on behalf of a number of persons.

In tearing up a siding on the Straitsville division of the Baltimore & Ohio Railroad recently, the section men discovered that several of the rails had been made in 1863. Subsequent investigation revealed the fact that these rails were part of a lot that were bought in England during the war at a cost of \$125 per ton in gold. The rails are still in very fair condition and for light motive power would last ten years longer.

The Raymond Manufacturing Co., Guelph, Ont., have put an incandescent lighting plant of their own in the stone shop, and the men in that building are now working thirteen hours per day. The adjusters at the brick factory are working the same number of hours, and the other departments are running full time. The probabilities are that before long the entire establishment will be running overtime, as the orders are coming in freely.

A good many travelers will be interested in knowing that the Grigg House, London, has changed hands. The present owner is Mr. Martin O'Meara, well known in hotel circles in London. Mr. Michael O'Meara, son of the proprietor, will assume the office of manager. Some improvements are to be made. A new writing and reading room for travelers will be one of the features under the new management, while the hotel front will be fitted with plate glass windows.

A RE-ORGANIZED FIRM.

A short time ago HARDWARE AND METAL noted the dissolution of Campbell & Wilson, stoves and tinware, Chatham, Mr. Wilson retiring. The latter's interest was bought out by T. E. Orr and the business will be continued under the style of Campbell & Orr. The new firm will also carry a general line of hardware, in addition to stoves and tinware.

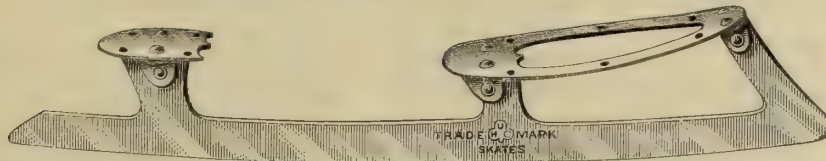
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



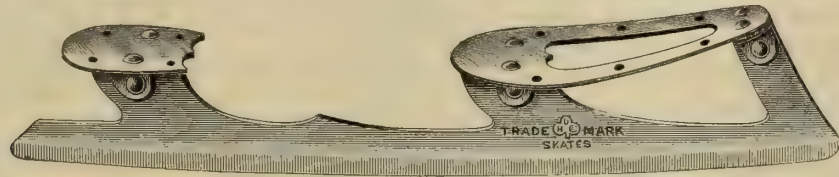
Plain Runner, Straight.



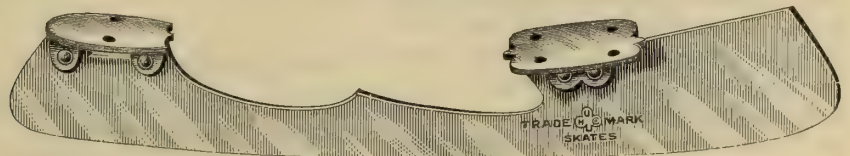
Plain Runner, Curved Blade.



Ribbed Runner.

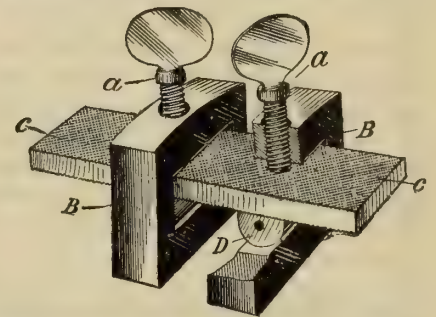


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY

THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.

Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street

— TORRINGTON, CONN., U.S.A.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No. 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

AMONG THE RETAILERS.

Gas Fixtures.

The gas fixture business this year has shown a marked improvement. McDonald & Willson, Yonge street, Toronto, have made this feature of the hardware business a specialty lately, and have kept in touch with the latest ideas and inventions. They say the business in gas fixtures, especially in gas heaters, has made great strides, and is now one of the surest and steadiest departments of the whole business. The heaters are much improved over past years and are consequently much more in demand, the trade being one that can be very profitably pushed, as the public are not yet fully awake as to the convenience of such heaters.

Making Specialties.

I notice that quite a number of the most progressive hardware dealers in the city are making a specialty of one line or another. The causes of this may be varied, but one of the principal of these is the fact that the great facilities of the departmental stores for displaying goods makes it necessary for the ordinary retailer to limit his display to one line or another. Another cause lies in the fact that inventors and designers were never busier than at present, and, in order to have on hand the latest ideas in any line, a dealer finds it necessary to devote special attention to this line. This specializing has generally proved a profitable departure to those who have devoted themselves to a good staple article or line of articles.

Christmas Trade.

I see signs in some of the hardware stores of Toronto that an effort is to be made to secure a share of the Christmas trade. This has been a good year. In the city and throughout the country generally work has not been as scarce as in past years, trade has been better, and prices for agricultural products more satisfactory. This should

mean a good Christmas season. There are in the hardware trade hundreds of articles which would make a pleasing and appropriate Christmas present. Some dealers make no effort to reach this trade, and get very little of it; others make the stationers, grocers, etc., hustle to catch the bulk of it.

A Pointer to Clerks.

In conversation with one of Toronto's successful manufacturers a few evenings ago, I was given some business pointers of good value and well worth repeating. He said: "Be always careful to avoid the belief that you know it all, and be just as careful not to make others think you are of the opinion that you know it all. Never think your services are indispensable to your employer, for once you allow such a thought to take possession of you your usefulness has greatly decreased. I have been in business for over 25 years, and I have always found that the man who thinks he knows it all, who thinks I cannot get along without him is not worth keeping in my employ. I dismiss at once everyone who shows to me, by his talk or actions, that such an idea has taken possession of him."

THE RAMBLER.

THE LEADING SKATE FACTORY.

The Starr Manufacturing Co., of Halifax, N.S., may fairly claim to be the most important skate manufacturers in Canada, if not in America. At their factory are made all kinds of skates from the every-day "Acme" to the highest grade of hockey, racing and figure skates. For 1897-8 they have added five new designs to their already complete issue, viz., the "Star Club," "Brass Top Skeleton," "Beaver," "Ladies' Beaver," and "Mabel Davidson" figure skate. These skates embody many new ideas, and are sure to be popular amongst skaters. These goods can be got from all the leading jobbers throughout Canada.

THE CYCLE PATH OF LIFE.

Let me moralize, and don't interrupt me unless you want to lend me money.

To-day we are an infant on the wheel, held up by some friendly hand, progressing slowly, filled with vague fears and soothing syrup.

To-morrow we can wobble a little, though we suffer many falls.

The next day our line is straighter, we call ourself a "wheelman," join the C.W.A. and own the sidewalk.

Then comes our rapid youth. We scorch—and sooner or latter are laid up for repairs.

Afterward we learn to ride more sedately, and we think seriously of life.

Now we begin to eschew the solitary path and seek the broad road where two may ride abreast. We try and discover to our delight that we can ride with one hand while the other encompasses the slender waist of a pretty girl.

Then we enter the holy state of tandem riding. In a sense we have to learn to ride over again. There is another period of wobbling, but eventually we do as well as the rest.

Now comes the period of caring tenderly for smaller wheels.

Finally we become so expert that we can ride the straight and narrow path.

And then we croak.—Yellow Book.

SWEET CONTENT.

Sweet are the thoughts that savour of content;
The quiet mind is richer than a crown;
Sweet are the nights in careless slumber spent;
The poor estate scorns Fortune's angry frown:
Such sweet content, such minds, such sleep, such bliss,
Beggars enjoy, when princes oft do miss.

The homely house that harbours quiet rest,
The cottage that affords no pride nor care,
The mean that grees with country music best,
The sweet consort of mirth and modest fare—
Obscured life sets down as type of bliss:
A mind content both crown and kingdom is.

—Robert Greene.

Meat Cutters

ENTERPRISE (all sizes) *GERMAN*

LARD PRESSES or SAUSAGE STUFFERS

AMERICAN AND CANADIAN.

We are offering special inducements in Canadian.

WRITE FOR PRICES 

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West **TORONTO.**

OUR WRAPPING PAPERS ...

possess a peculiar toughness
adapting them for the HARD-
WARE TRADE.

The long fibre we make
them of is responsible for this.

SEND FOR A SAMPLE ORDER
PRINTED or UNPRINTED.

The E. B. EDDY CO., Limited

Hull, Montreal, Toronto, Quebec, Hamilton, Kingston, St. John,
Halifax, Winnipeg, Victoria, Vancouver, St. John's, Nfld.

HANDSOME AND USEFUL BRASS WARE.

HARDWARE AND METAL last week printed an interesting interview with Mr. W. Willis Mitchell, representing John Cartland & Son, the brass goods manufacturers, of Birmingham, Eng. We this week print the result of interview with some of the samples of the goods which Mr. Mitchell has with him.

The goods were displayed in one of the large sample rooms of the Queen's Hotel, Toronto, and three of the four sides of the room were occupied by them. There were handsome brass novelties, such as ink stands, mantel-piece clocks, candlesticks, etc., in profusion; gongs of various designs; pretty hall sets, with mirror, gong and brush combinations; hearth furnishings, handsome in pattern and substantial in workmanship; rich-looking and strongly-made door pulls, hinges, cornice pole devices, and a number of other things beyond our memory to mention.

"What a beautiful polish these goods retain," remarked **HARDWARE AND METAL'S** representative, as he examined several of the samples.

"We, you see, use a patent varnish, which is burned into the goods," rejoined Mr. Mitchell. "The articles thus treated never tarnish and, consequently, do not require cleaning; indeed there must be no attempt to clean.

Aside from the artistic ware, one of the first things that attracted the attention of **HARDWARE AND METAL** was a unique cornice-pole joint. Everyone knows the difficulty often experienced in making joints in cornice poles in bay windows. This particular joint, which is known as Cartland's patent, does away with all difficulty. It can be put into position in a few minutes, and enables every hardwareman who handles cornice poles to make his own joints without calling in the aid of a mechanic should he not be handy with tools himself, while at the same time securing a much better joint than by the old methods. It is made in all sizes.

Another ingenious device was a patent plug for either picture rods or curtain-pole ends. This plug is a simple contrivance made from sheet steel, is easily attached to the screw, can be taken off at will, and fits any size tube. It is very cheap.

Cartland's patent double action spring is another of those ingenious devices which the inventive mind has produced. It is made upon the adjustable or capstan principle, thus facilitating the fastening to door jambs. This can be accomplished by anyone unacquainted with carpentering. This spring has an extra length of coil, which renders it stronger and more durable.

In one of the catalogues was shown a cut of Cartland's patent adjustable "Climax" floor spring. These springs have had an enormous sale in Great Britain, being used for heavy doors in public buildings, offices, etc. They are now making their appearance in Canada and are meeting with favor from architects and builders.

Cartland's patent window opener, catalogued as A2740, is a contrivance for opening and closing fan lights. Its peculiar and commendable feature is that when the window is closed the stay falls down flush with the window, thus allowing a blind to be used without any interference whatever. As the use of fan lights is increasing in Canada this particular opener will doubtless experience the benefit of it.

Cartland & Son have in the press a new issue of their pattern book, which will be found quite up to date, containing, as it does, the newest and most exclusive designs of all articles suitable for the brass founders', builders', cabinet makers' and artistic brass ware trades.

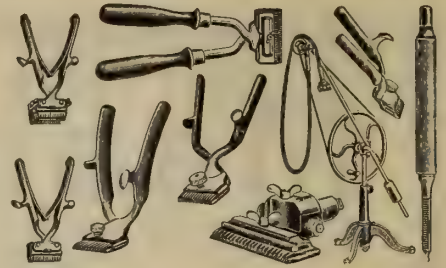
Mr. Mitchell left for Hamilton on Friday, and after doing business in that city and in London will leave for Great Britain via New York. He expects to be back in Canada next October on his way home from the Antipodes. "I must," he said before leaving Toronto, "express my thanks to buyers for the way they have received me. They are sharp, shrewd men and know their business, and if I have any complaint to make it is that they are importing United States goods of a very low grade quality, but I really think we English people, through our inattention to the Canadian market, are most to blame for this."

READY FOR '98'S BICYCLE TRADE.

Bertram, Wilson & Co., wholesale hardware and metal merchants, Toronto, intend to be right in line in the bicycle business in 1898. They have this week secured the agency for Ames & Frost, of Chicago, manufacturers of high grade "Imperial" wheels. They will also push the "Norseman" bicycle, in which they last season had such a success. Catalogues for both these wheels will be ready next month. Bertram, Wilson & Co. have already received several enquiries for specifications for 1898 bicycles.

GOOD COW TIE SEASON.

The B. Greening Wire Co., Hamilton, have had a successful season in the sales of cow ties, their sales exceeding their anticipations, so that they have had to work day and night to fill orders. They have now increased their capacity, and as they have overtaken their orders, they can now ship promptly from stock.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

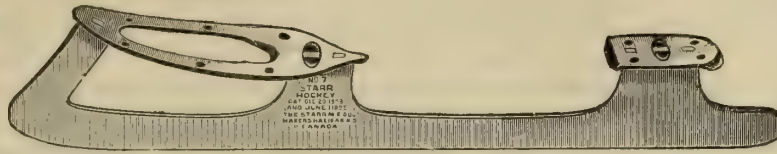
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Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

THE STARR HOCKEY SKATE



— PATENTED —

BLADES. —Welded and tempered by our special process.

TOPS. —With patented re-enforcements, which preclude possibility of breakage, and insure light weight.

DESIGN. —In accordance with the advanced ideas of leading Canadian hockeyists.

WORKMANSHIP and MATERIAL. —Equal to our GENUINE ACME.

PRICE. —Ask your Jobber, or write direct to.....

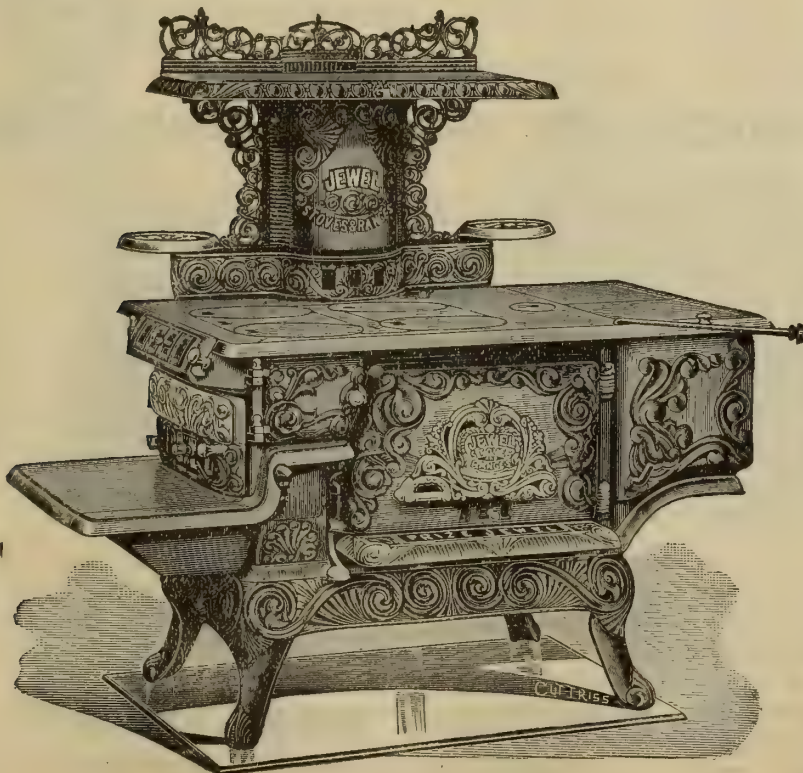
The STARR MANUFACTURING CO., Limited

T. L. PATON, Resident Agent
MONTREAL.

— DARTMOUTH, N.S.

Empire Jewel Range (6 Hole.)

Prize Jewel Range (4 Hole.)



These are high-class ranges with one-piece **Sheet Steel Oven**, measuring 20 x 20 x 12 inches. Deep Ash Pan, large Feed Door, and all improvements up to date.

WE HAVE ALSO THE

Sterling Jewel (6 Hole)

which is smaller than the Empire, but of similar construction, and a splendid worker.

THE . . .

Household Jewel Range (4 Hole)

is specially adapted for burning wood. It has extra large Oven and Fire Box.

Our line of **STEEL RANGES** in many varieties is worth examination.

BURROW, STEWART & MILNE

Manufacturers

— HAMILTON

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Nov. 26, 1897.

HARDWARE.

BUSINESS has been pretty active this week for immediate shipment before river navigation closes, but demand for forward account is diminished. Attention has centered on wire and cut nails, horseshoes, screws and bolts and nuts. Rope, draining tools and cement have also been pushed forward. Enquiry for skates and axes is a new feature, while case and pocket cutlery have been fairly active in a sorting way. On the other hand, quietness has ruled in sporting goods, barbed and plain wire and many other lines.

BARBED WIRE — Business very quiet with prices unchanged at \$2.35 f. o. b. Montreal.

PLAIN WIRE — Business in plain wire is confined to small orders for hay baling sizes. Discounts are unchanged at 30 and 10 off.

WIRE NAILS — There has been a good demand for these, the movement being well maintained. We quote \$1.90 f.o.b. Montreal.

CUT NAILS — Business continues light, and orders are smaller than they were, as the river boats stop running this week. The base price is unchanged at \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS — There has been little doing in horse nails during the week, and discounts are unchanged at 50 per cent.

HORSESHOES — Makers report that they have sent forward a considerable quantity of these by water this week, but expect a quiet spell now that navigation will soon be closed. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS — There have been fair orders for these for immediate shipment, but forward business is light. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE — Unchanged at 12½ per cent.

BOLTS — There have been some orders noted, but business is quiet as a whole. Discounts are: Carriage bolts, ¼ and 5-16, 70

per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS — Trade is quieter in these also. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

FILES — As last reported. We quote as follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE — A fair trade has been transacted in rope and prices generally are steady. We quote as follows: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS — The movement in these is quietly maintained. We quote Royal Canadian at \$29.

SPADES AND SHOVELS — Draining tools continue to move out well.

SKATES — The Boston City, which is now on the way up the river, has large consignments of skates for importers here. Demand for these has been more conspicuous during the week.

TIN AND IRON WARE — Stove furnishings have been enquired for to a fair extent on local account.

HOLLOW WARE — Continues much the same as last week.

AXES — These are being asked for more freely for forward delivery.

BUILDING PAPER — Moves along quietly without any material change. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.40.

HINGES — A moderate trade has been done. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY — Both case goods and pocket cutlery have been well enquired for in a sorting way.

SPORTING GOODS — Business is rather quieter, but there are still a few orders going forward.

SHOT — Quiet and steady: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

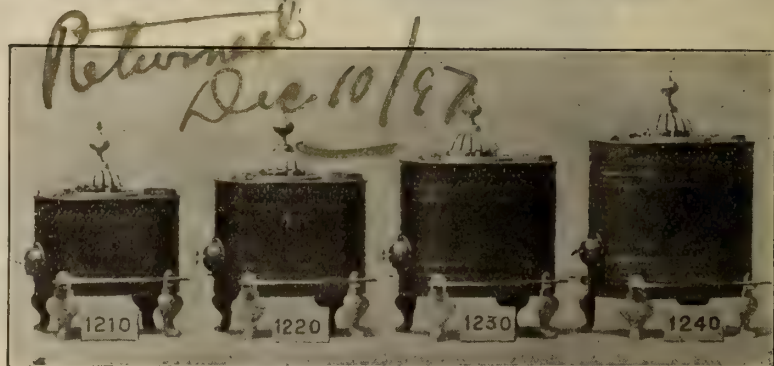
CEMENT — There has been a good demand for cement and orders have been rushed forward freely by the last river boats, but after this week quietness is looked for. We quote: English, \$2.10 to \$2.20, and Belgian, \$1.85 to \$1.90.

FIREBRICKS — Fairly active and steady at \$16 to \$21 per 1,000 as to brand.

METALS.

There has been a fair movement in heavy iron and metals during the week, but dullness is expected after the close of the present week. Values generally are steady.

FAMOUS AIR TIGHTS



FOUR SIZES. Planished or Russian Iron Body.

Take 21, 22, 23 and 24 in. wood respectively. Cast Top, with large wood opening and nickel-plated fancy swing cover and urn. Front Screw Draft. Loose parts packed inside for shipping. Every stove papered and crated.

... Manufactured by ...

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG AND VANCOUVER

Fire Bricks**Drain Pipes****Contractors' Supplies****F. HYDE & CO.**

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

**Improved Wanzer Lamp**

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER. WANZER LAMP & MFG. CO
HAMILTON.



"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
— Longfellow.

DO YOU?

WISH THUS TO BUILD
an advertisement
in the
**CONTRACT-
RECORD.**
TORONTO
will bring you
tenders from the
best contractors

FIG IRON—Several fair lots of Scotch pig have sold on the basis of \$18 ex store, and No. 1 Hamilton at \$16, but demand is not so active as it was. We quote as follows: No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—Some round lots of bar iron have sold at \$1.35 in 50-ton lots, but in an ordinary way the range is \$1.45 to \$1.50.

BAND IRON—Business is quiet on the basis of 30c. advance on the bar iron prices.

HOOP IRON—Trade quiet and prices steady at \$2.25.

SHEET IRON—A quiet jobbing trade is doing in sheet iron and prices are steady, the base figure being \$2.25.

SHEET STEEL—The same remarks apply to this article, prices ruling firm on the basis of \$2.35.

GALVANIZED IRON—Quite a lot of these have been moved during the week, but fewer orders on forward account are reported this week than last. We quote: No. 28 Queen's Head, \$4 to \$4.15 in case lots.

TINNED IRON—Quiet. We quote 5½c. for 6 x 30 No. 24; other sizes and gauges the usual extras.

LEAD PIPE—Orders are small and trade quieter than it was. We quote: Lead pipe, 7c.; composition waste, 7½c., with a discount of 27½ per cent.

PIG LEAD—Trade of a quiet character, with prices unchanged at \$3.85 to \$4.

INGOT TIN—A few small lots have gone out at unchanged prices, viz., 16 to 16½c.

INGOT COPPER—Quiet and unchanged at 12 to 12½c.

SHEET COPPER—There has been little change to report. We quote: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—Jobbers have been very busy this week pushing forward orders, but look for less activity after the close of the week, and values continue very steady at \$2.10 to \$2.25.

TIN PLATE—There has been a good demand for tin plate, but demand is less active than it was earlier in the week. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., 3.80; do, I. X., \$4.80.

TERNE PLATES—Business quiet and prices steady at \$6.

COIL CHAIN—There has been a fair enquiry for this article at \$2.85 for ⅝ up.

SHEET ZINC—Moderately active and steady at 5 to 5½c.

SOLDER—Unchanged at 11 to 11½c.

SPELTER—Little doing and prices steady at \$4.50 to \$4.70.

Cow Ties

Prompt shipment. Full line. 4 kinds. 6 sizes.

The B. Greening Wire Co., Limited
HAMILTON AND MONTREAL

Abbott & Co.

ROLLING MILLS

.. MONTREAL

MERCHANT BAR IRON—

		BRAND
Best Refined	Bar Iron	AVB
"	Rivet Iron	AVB
"	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
"	Rivet Iron	AXB
"	Stay Bolt Iron	AXB
"	Hammered Iron	AHB
"	Charcoal Iron	ACB

**Tyre, Sleigh Shoe,
Axe and Rivet STEEL.**

NOVA SCOTIA STEEL CO.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel**SPORTING GOODS**

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moc-casins, etc., etc.

Send for Catalogue C.

The Wightman Sporting Goods Co. 403 St. Paul St.
MONTREAL

ANTIMONY—Quiet and unchanged at 9½ to 10c.

IRON PIPE — The demand for iron pipe has been well maintained. We quote: Black pipe, ¼-inch, \$2.05; ¾-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1 ¼-inch, \$5.35; 1 ½-inch, \$6.90; 2-inch, \$9.35; and 2 ½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1 ¼-inch, \$10; 1 ½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—Dull, as last quoted, at \$13.50 to \$14.

GLASS.

There has been an active movement in window glass, and some jobbers as a result of it asked an advance of 5c. this week, and we now quote: First break, \$1.35, and second, \$1.45 per 50 feet, and third break \$3 per 100 feet.

PAINTS AND OILS.

The week has been a fairly active one in this line in matter of sorting up shipments. Prices generally are steady, and with the close of navigation dullness is looked for.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¼c.; kegs, 4½c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES — There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

Business quiet and steady. Canadian is unchanged at the decline, 14c. in car lots and 15c. in small quantities, and American 16½c. in car lots and 17½c. in small lots.

COAL.

Unchanged. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

The hide market has ruled quieter since last report, and we quote prices steady at 6½ to 8½c. for beef hides and lambskins 75 to 80c. each.

MONTREAL NOTES.

Jobbers here have advanced the price of window glass 5c. per break.

Stocks of cement can be pretty accurately gauged now, and it is generally admitted that they will be light.

Demand for stove furnishings, such as coal hods, stove boards, etc., is more active on city account this week.

The Boston City has some large consignments of skates for importers here, altogether possibly from 5,000 to 6,000 pairs.

ONTARIO MARKETS.

TORONTO, Nov. 26, 1897.

HARDWARE.

A GOOD business continues to be done, and is certainly much better than it was at this time last year. Shelf hardware, fall specialties, granite and tin ware are all going out well. Mining and lumbering supplies have been going out with a rush, the last boats for the upper lakes leaving this week. Orders for cut nails are a little better, but they are still light. The demand for wire nails is moderate. Orders for horseshoes are coming in freely. Trade in churns continues to improve. A number of enquiries for poultry netting are being heard. Prices in all lines of goods are much about the same as a week ago.

BARB WIRE—Nothing doing. The ruling price for Toronto is \$2.30 for barb wire and plain twist and \$2.50 for staples. For outside points the price is governed by freight rates from Pittsburg.

ORDINARY FENCE WIRE, ETC.—Very little doing. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—Trade is much about the same as a week ago. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—Business is only moderate, and some complaints in regard to the cutting of prices are heard. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points other than those named the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—While the orders are a little more numerous, the quantities going out are still small. Even ten-keg lots are seldom called for. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—The scarcity noticed last week has been partially overcome and shipments are now being made more promptly. Discount, 50 per cent.

HORSESHOES — Orders are coming in freely. More steel shoes are wanted than

for some time. We quote: \$3.25 f.o.b., Montreal, for iron shoes.

SCREWS—Business is being well maintained. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, 87½ and 10 per cent.

BRASS AND COPPER WIRE—Trade is quiet. Discount, 12½ per cent.

BOLTS — The usual trade is being done. Discounts are: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—There is not much doing in either the copper or tinned, and the demand is principally for the slotted or bifurcated rivets in cartoons. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE — The demand for both sisal and manilla continues steady. There is quite a demand for rope halters. We quote: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

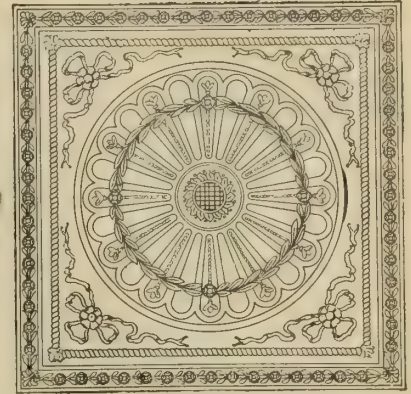
CHURNS—Trade is picking up nicely. Discount, 60, 10 and 5 per cent. Delivery points are Toronto, Hamilton, London and St. Mary's. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—The improvement noted in the demand last week has been maintained. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS. — Orders for the cheaper grades have been coming in freely, but a scarcity of supplies is being experienced. Discount, 45 and 2½ per cent.

FALL SPECIALTIES—Trade is keeping up well. Skates and sleigh bells are in especially good demand.

EMBOSSSED STEEL CEILING



OUR CEILINGS are all well and evenly coated on both sides with the **Best of Pure White Zinc**, mixed with **Pure Linseed Oil and Turpentine**, which thoroughly protects the metal, and when up they may be painted in any manner desired, from an ordinary "flat" finish in one or two tints, to the more elaborate decorative finish of "wiping" each plate in a number of tints, and touching up the raised parts with Bronze or Gold Leaf. There is practically no limit to the decoration that can be put on our Goods, the Embossing and Design giving the decorator unlimited scope for his abilities.

Beware of inferior imitations. We shall be pleased to send you our catalogue and to submit designs and estimates.

YOU SHOULD HANDLE THESE GOODS.

METALLIC ROOFING CO. Limited

TORONTO

THE PIONEERS AND MOST EXTENSIVE MAKERS OF SHEET METAL BUILDING MATERIAL.

SPORTING GOODS—Not much doing, and practically nothing outside ammunition.

CUTLERY—A fair sorting up trade is being done, and enquiries for goods for the holiday trade are beginning to come in.

SNOW SHOVELS—An occasional order is being received for wood shovels, but in general the demand is altogether for the steel kind, shipments of which are numerous. We quote \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—Owing to the exceedingly strong demand a scarcity is again to be noted, and jobbers are finding it difficult to make shipment. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Trade is moderate. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

HINGES—Trade is fair. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

POULTRY NETTING—A number of enquiries are already being received for poultry netting for next season's supply. Job-

bers are yet, it is understood, barely in a position to name definite figures.

CEMENT—Trade has been quieter this week. Stocks in English and Belgian cements are light. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.60; Belgian do., \$2.40; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

Trade in metals is keeping up well and is largely accounted for by the continued mild weather, which has allowed outdoor work to be carried on longer than usual.

PIG IRON—The action of the Customs authorities, in prohibiting the importation of prison-made United States pig iron, has caused less business to be done here in southern irons. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Quite a number of shipments have been made during the week, and enquiries for prices are coming in more freely. Sleigh shoe and tire steel are in good demand. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Trade is fair. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—In the No. 1 grade there has not been quite as much business done, but orders for the ordinary sheets have been coming in freely. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Is going out freely, some large orders having been received during the week. We quote as follows: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—The demand is being well maintained. Stocks are in little better shape, and in most instances prompt shipments can be made. The demand appears to be about equally divided between the American and English makes. We quote as follows: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to

20 gauge, \$3.05. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Trade continues moderate. We quote: $3\frac{3}{8}$ and larger, \$1.75 per 100 lbs.

TINNED IRON—Quiet: We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, $4\frac{3}{4}$ c.; extra large sizes, $6\frac{7}{8}$ to $7\frac{5}{8}$ c. per lb.

LEAD PIPE AND TRAPS—There is not a great deal doing. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, $27\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—A number of good sales have been reported this week and in general a steady trade is being done. We quote pig lead at 4 to $4\frac{1}{4}$ c., and bar, at $4\frac{1}{2}$ c.

SHOT—Trade is moderate. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, $12\frac{1}{2}$ per cent.

INGOT TIN—Some good sales have been made during the week. We quote $16\frac{1}{4}$ to $16\frac{1}{2}$ c. per lb.

INGOT COPPER—While most of the orders are small a number of good shipments are reported. We quote 12 to $12\frac{1}{4}$ c. per lb.

SHEATHING COPPER, ETC.—Trade is rather quiet in all lines. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c., according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Orders during the week have, as a rule, been of fair size, but stocks are in better shape, a number of large shipments having been received. We quote: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$2; $\frac{1}{2}$ inch, \$2.35; $\frac{3}{4}$ inch, \$2.87; 1 inch, \$3.87, $1\frac{1}{4}$ inch, \$5.10; $1\frac{1}{2}$ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, $\frac{1}{2}$ inch, \$4 to \$4.25; $\frac{3}{4}$ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; $1\frac{1}{4}$ inch, \$9.25 to \$9.62; $1\frac{1}{2}$ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—Trade is quiet. Discount, 60 and 10 per cent.

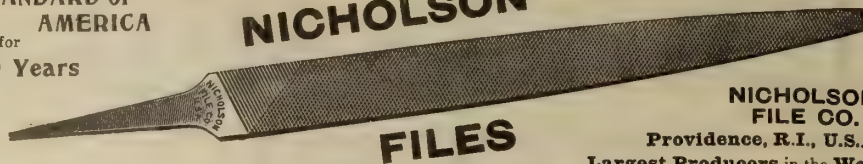
RANGE BOILERS—Trade is moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Trade is good, and stocks are in such shape that orders can be completed on receipt. We quote: Half-polished, 52-sheet boxes, \$2.35; ditto, 60-sheet boxes, \$2.40; dull, 75-sheet boxes, \$2.50; all-bright, "Garth," \$2.90 per box; ditto, "Alaska," \$3.

TIN PLATES—Trade is fairly satisfactory, with the demand for the better grades a little more active. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to

STANDARD of
AMERICA
for
30 Years

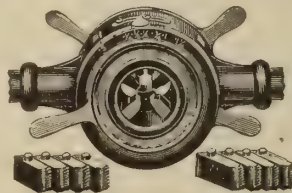
NICHOLSON



FILES

NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



FOR PIPE.

In Stocks and Dies
there is no better than

HART'S DUPLEX
ADJUSTABLE.

Write for Lists and Discounts
The Hart Mfg. Co.

20 Wood St., Cleveland, O., U. S. A.



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guar-
anteed to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the 38-40 and 44-40 cartridges, but also the 25-20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

\$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade has fallen off, only a few orders having been received during the week. We quote: 1 C, \$6 to \$6.25; 1 X, \$7.50.

SHEET LEAD—Trade is fair. We quote: $5\frac{1}{2}$ c. per lb.

COIL CHAIN—Business has been fair during the past week. We quote: $\frac{1}{4}$ in., $4\frac{3}{8}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Is still going out freely, but orders are principally on a small scale. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

SOLDER—Trade is unchanged. We quote: Standard, 11c.; strictly half and half, $11\frac{1}{2}$ to 12c.

ANTIMONY—Trade is a little better than a week ago. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

Business is keeping up well in all sections of the province. Stocks are very light and prices are unchanged. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

Business generally is quieter this week. The city trade has been brisk, mail orders have been fair, but the travelers have done little or nothing. White lead, red lead, oils and sundries are quiet. Varnishes are still in demand. Turpentine is firmer, but, though stocks are light, prices will not materially advance, as the demand is well over. Sales are about the average for this season of the year. Putty is in good demand. Prices are unchanged. We quote:

WHITE LEAD—Ex Toronto, we quote:

ESTABLISHED 1860.

INCORPORATED 1895.



Steel Enamelled Teapots

"STAR"

Pale blue enamel, fancy decorated, with nickel plated covers. Just the thing for your Xmas trade. Made in all sizes. Send for sample and prices.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

Trade is moderate in all lines, with iron scraps moving a little better. We quote: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25 to 30c.; No. 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2½ to 2¾c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

SEEDS.

Foreign markets report a continued stagnant condition of trade in clover seeds, and this is confirmed by indifference in buying, liberal concessions in price on the part of

shippers being necessary to induce business in alsike, values for which range from \$3 to \$4.50 per bushel, the latter only for really choice qualities. Red clover commands some attention for really fancy qualities, for which a fair price is being paid, prime to choice quoted at \$3 to \$3.25 per bushel at outside points. Timothy is unchanged at \$1 to \$1.25 per bushel for machine-threshed seed.

PETROLEUM, ETC.

Business is still good, with prices unchanged. We quote in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; American water white 17½c.; Pratt's astral, 17c. in bulk.

COAL.

Business during past week has been fair. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut, \$4.46, net tons.

MARKET NOTES.

Glass is scarce and firm.

McKay & Co., hardware, Brussels, have gone extensively into granite ware (Kemp's).

The Bertram Engine Works Co., Limited, of Toronto, have placed orders for about 500 tons of steel plates during the past month.

J. L. Rea, hardware, Milverton, has just got settled in his new premises in the new

SKATES

Cutlery, Guns, Ammunition
Shelf and Heavy Hardware
Metals, etc.

Caverhill, Learmont & Co., Montreal, Canada

brick block erected the past summer expressly for his rapidly increasing trade.

Bertram, Wilson & Co. are in receipt of a shipment of horseshoes from the Phoenix Horseshoe Co., of Illinois. Blacksmiths who have seen samples are reported to have placed orders for the shoes.

MANITOBA MARKETS.

WINNIPEG, Nov. 23, 1897.

SPORTING goods are in brisk demand. The skating rinks are all open, the hockey clubs are getting together, curling rinks are being flooded, stones got out, new stones bought, for every year sees new devotees added to "th' roarin' game" in Manitoba. In eastern Canada it used to be looked on as a game for men from middle age upward, but here some of the most enthusiastic curlers are quite young men. Skates are also selling well, and retail hardware windows are full of hockey sticks. In wholesale hardware there has been no change since last week; and, in fact, none is expected until after navigation closes. Business is steady, prices well maintained, and payments fairly well met.

In the retail hardware stores some very choice goods are being displayed just now. In J. H. Ashdown's the collection of lamps is almost bewildering in its beauty. Many of the designs are unique. James Robertson & Co. are showing very handsome silverware, while Graham & Rolston are making special display of aluminum goods. Many of the designs in this material go back to the squat comfortable jugs and pots familiar to our childhood, and which give a kitchen such an air of prosperous well-being.

In mining news the chief item of interest for the week was the brief visit here of Mr. James Morrish, mining expert, on his way to England to attend the meetings of the mining company in which Sir Charles Tupper is so largely interested. Mr. Morrish has been in British Columbia since June looking into matters for this company and is most favorably impressed with the Kootenay country. Considering that this gentleman has opened large mines in Madras, India, Western Australia, The Argentine, Colorado and South Africa, his opinion is of weight. Mr. Washbourne, of The Duluth Herald, has also been a visitor. This gentleman is getting out a special mining number of his paper for Christmas; it is to deal specially with the Lake of the Woods, Rainy Lake and Manitou districts of Western Ontario. Americans are much interested in our mines and manufacturers of American mining machinery are losing no time in pushing their goods. Many orders are now being placed with American houses for machinery to be put in next spring and our

Canadian manufacturers will need to keep moving if they want to keep the bulk of this trade to themselves.

The coal and wood market is a good one just now, and coal merchants wear a much more benign expression than they did three weeks ago, when all the fall coal was a drug on the market. The supply of wood is still short.

In paints, oils and glass there is no change, except that the little rush of ten days ago is over for glass.

Barb wire, 100 lbs.	\$2 60
Plain twist wire and staples.	2 75
Oiled annealed wire.	2 80
"	11 2 90
"	12 3 00
"	13 3 15
"	14 3 30
"	15 3 65
Wire nails, 30 to 60 dy, keg.	2 65
" 16 and 20	2 70
" 10	2 75
" 8	2 80
" 6	2 95
" 4	3 05
" 3	3 30
Cut nails, 50 and 60 dy	2 50
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	
Horse shoes, iron, light, medium and heavy, keg.	\$4 00
Snow shoes.	4 25
Steel, light.	4 25
" extra light.	5 75
Bar and band iron, \$2.10 basis.	
Swedish iron, \$5 basis.	
Tool steel, Black Diamond, 100 lbs.	8 00
Jessop	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs.	3 50
26 gauge	3 75
28 gauge	4 00
Galvanized American, 16 to 24 gauge	4 00
26 gauge	4 25
28 gauge	4 50
Genuine Russian, 1b	12
Imitation	8
Tinned, 24 gauge, 100 lbs.	7 25
26 gauge	7 50
28 gauge	8 00
Tin plate, IC charcoal, 20 x 28, box	9 00
" IX	11 00
" IXX	13 00
Canada plate, 18 x 21 and 18 x 24	3 25
Sheet zinc, cask lots, 100 lbs.	6 00
Broken lots.	6 50
Pig lead, 100 lbs.	4 25
Wrought pipe, black, ¾ inch.	2 50
" ½ inch.	2 75
" ¾ inch.	3 00
" 1 inch.	4 00
" 1 ¼ inch.	5 00
" 1 ½ inch.	7 00
" 2 inch.	8 50
" Over 2 inch.	11 50
Rope, sisal, 7-16 and larger.	65 p.c.
" ¾	6 75
" ½ and 5-16	7 25
Manilla, 7-16 and larger	7 75
" ¾	8 25
" ½ and 5-16	8 75
Cotton, all sizes, lb.	9 25
Axes, per box	15
Screws, flat head, iron	\$5.50 to 8 00
Round "	85 p.c.
Flat " brass.	77½ p.c.
Round "	80 p.c.
Bolts, carriage	72½ p.c.
Machine.	60 p.c.
Tire.	60 p.c.
Sleigh shoe.	55 p.c.
Rivets, iron.	65 p.c.
Copper, No. 8, lb.	50 p.c.
Spades and shovels.	25c. p.c.
Harvest tools.	40 p.c.
	60 to 60-10 p.c.

Axe handles, turned, second growth, hickory, doz.	2 50
No. 1.	1 50
No. 2.	1 25
Octagon extra.	1 65
No. 1.	1 25
Ammunition, cartridges, Dominion R.F.	50 p.c.
Dominion, C.F., pistol.	25 p.c.
" military.	15 p.c.
American R.F.	35 p.c.
C.F. pistol.	5 p.c.
C.F. military.	5 p.c.
Loaded shells, Eley's 12 gauge, M.	16 00
American, M.	16 20
Robin Hood, M.	18 00
Shot, ordinary, per 100 lbs.	6 00
Chilled.	6 50
Powder, F.F., keg.	4 75
F.F.G.	5 00
Robin Hood.	10 00
Tinware, pressed.	70 and 30 p.c.
Granite ware, according to quality.	50 and 10 p.c.

UNITED STATES MARKETS.

NEW YORK, Nov. 24, 1897.

PIG TIN—There was no change to note in the local market, 13.80c. remaining about the lowest limit for cash, spot sales, while for f.o.b. lots for out-of-town, 13.85 to 13.95c. was quoted, according to quantity. The course of the silver market is awaited with much interest by the tin trade. Arrivals to-day were 25 tons per steamer Obdam.

COPPER—A steady but quiet market is all that can be reported. There is, however, no extreme dullness, a fair amount of business in the aggregate being transacted. Lake copper may fairly be quoted at 10¾ to 10⅞c.; electrolytic at 10⅞ to 10¾c., and casting brands at 10½ to 10⅞c.

PIG LEAD—There is a waiting market, both on the part of sellers and buyers. A few carloads were reported sold at 3.80c., which may be said to fairly represent the market price.

SPELTER—Only a moderate amount of business is passing. Some sales are reported at about 4 to 4.05c., with higher figures quoted for some brands.

ANTIMONY—Previous quotations of 7 to 8¼c. remain unchanged.

SITUATION VACANT.

TRAVELLING MAN REQUIRED. 1st JANUARY, 1898, by a large manufacturing firm. Must be fully acquainted with the Stove, Furnace and Tinware Trade. Apply, stating age, experience, salary expected, and giving reference. Address "P.D.," **HARDWARE AND METAL**, Toronto. (48)

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MONTREAL - - - TORONTO

TIN PLATE—New business is offered only in restricted volume. The market is fairly steady, with no important change in prices.

IRON AND STEEL—Exports of light rails constituted the leading feature of the market for railway material, though there is a brisk demand for "reloyers." No large orders of new stock for home consumption are reported. In other departments there is little change. A fair volume of business is being done in new material at unchanged prices.

UNIQUE CARD DISPLAY.

Marshall & Mason, hardware, stoves and tinware, Sarnia, are quite pleased with the result of their recent exhibit at the Sarnia Fair. A unique feature of their exhibit was three large display cards. One of these was dressed with saws, axes and carpenters' tools. The other two were decorated with spoons, knives, forks and kitchen goods generally. In displaying these Marshall & Mason conceived the idea of fastening the cards containing these goods to screen doors instead of nailing them on to boards, as has been the custom heretofore, and thus doing away with unsightly nails. The articles, it might be mentioned, were fastened to the card by cotton, which was brought through the screen door and tied. By adopting this method not only were better results obtained, but the work was done much more expeditiously.

A MYSTERIOUS GRANITE KETTLE.

G. A. Binns, hardware merchant, Newmarket, had an interesting exhibit at the recent fair held in his town, and a feature of it was a very large granite kettle which was suspended from the ceiling and emitted, to the astonishment of the visitors, a continuous stream of steam. When questioned by the visitors as to what caused the steam to come from the kettle, when there was apparently no fire by which to produce it, they were told that the wire which suspended the kettle, was connected with an electric dynamo, and that the steam was generated in this manner. Had the visitors, however, been able to look into the kettle they would have seen therein a coal-oil stove with a boiling kettle of water on it.

MR. DE LISLE'S APPOINTMENT.

Mr. C. A. de Lisle, late with the Dominion Wire Manufacturing Co., has been appointed agent in Canada for the Consolidated Steel Wire Co., of Cleveland, Ohio., reputed to be the largest concern of its kind in the world. Mr. de Lisle has had many years experience in this particular trade, being with the Dominion Wire Co. alone for 15 years. As after January 1st

next barb wire will be put upon the free list, the Consolidated Steel Wire Co. will probably secure in Canada what it already has in the United States, namely, the larger proportion of the trade in this line. Mr. de Lisle's office in Toronto will be 125 Front street east.

A HARDWAREMAN'S NEW STORE.

G. R. Hannah, of Shelburne, whose store was destroyed by fire in the early part of the year, has just completed a new building on the site of the old building at a cost of about \$15,000. The block occupies the principal corner in the town, and is divided up into several stores. The Dominion Bank occupies the corner, while Mr. Hannah reserves for himself two of the stores facing

on Owen Sound street. The floors are of cement and fire proof, while the ceilings are metallic. The cornice work is also of the same material, and is finely decorated. Mr. Hannah can with good reason boast of having one of the finest edifices between Toronto and Owen Sound. The building is not only handsome, but Mr. Hannah has in his store many modern appurtenances for carrying on a hardware business. In the cellar is a galvanized oil tank, which, in order to make it additionally fire proof, has been covered with cement. The capacity of the tank is one carload. The dimensions of the building, it should be stated, are 50 x 150 feet, and the upper flat has been fitted up for lodge rooms of immense size. Mr. Hannah is to be congratulated upon his enterprise.

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ST. JOHN'S WINTER PORT.

MR. W. S. FISHER, president of the St. John, N.B., Board of Trade, and a member of the wholesale hardware and stove firm of Emerson & Fisher, on Monday last addressed a meeting of business men and others at the Toronto Board of Trade in regard to St. John as a winter port.

Mr. Fisher, in his opening remarks, referred to the efforts made by the people of St. John themselves to improve their port. They had spent in the past two or three years \$750,000 out of the taxes on new wharves. Their idea was not to make it a local but a national scheme, and St. John asked the co-operation of the people of the west in carrying out their idea. They had done their share in building up a high-way across the continent, and they felt it was time they should profit. As showing how the port had developed, Mr. Fisher mentioned that the Beaver line, which, with a small subsidy, formerly gave a fortnightly service between St. John and Liverpool, were now running a weekly service, and there was a fortnightly service to London, Glasgow, Dublin and Belfast, while there would be three sailings during the winter to Aberdeen. Mr. Fisher pointed out that St. John could not be considered the rival of Halifax, although each port should take advantage of its geographical position. The true rival of St. John was Portland, and it was a question of whether Canadians were going to build up a foreign port at the expense of their own.

TRADE DEVELOPMENT.

When, Mr. Fisher said, the Canadian Government had refused to grant subsidies to steamers calling at foreign ports, the United States Government appropriated \$800,000 to expend on Portland harbor, and hold Canadian trade. Mr. Fisher said he was authorized by the transportation companies to say that they would grant as low rates out of St. John as could be obtained from any other port. As instancing the increase in the lumber trade alone of St. John, Mr. Fisher stated that in 1895 63 sailing vessels and 55 steamers carried 129,000,000 feet of lumber to the Old Country; in 1896 52 sail and 95 steam craft carried 168,000,000 feet; and in the ten months of 1897, 52 sail and 180 steam craft carried 226,000,000 feet of lumber. The winter exports last year were 78,000 tons of general freight, 1,500,000 bushels of grain, 8,000 cattle, 3,000 sheep and lambs, and 1,288 horses. Mr. Fisher quoted from a railway rate sheet, showing that the import rate on first-class goods by the all-Canadian route was 36c., against 53c. by the American route. This was a striking difference.

WEST INDIAN TRADE.

Turning to trade with the West Indies, Mr. Fisher pointed out that there was a field for Canadian enterprise. The present was an admirable time for shippers of flour to secure a foothold in the West Indies, as he was informed that Canadian millers could undersell the American millers. Last year there were shipped out of New York 600,000 barrels of flour, which showed that there was the business to secure. So far as the facilities at St. John were concerned, Mr. Fisher promised that exporters would be given quick despatch.

Mr. Fisher also referred to the favorable position Canada had secured in the minds of the people of Great Britain, and now was the time for us to follow up the advantage we had gained. He said he cordially approved of the suggestion that a commercial agent should be appointed in the old country. He thought it a very good scheme. Some of the other colonies had business representatives in Great Britain, and he thought it strange that the Antipodeans were smarter than we were in that respect.

At the conclusion of Mr. Fisher's address the following resolution was moved by Mr. A. E. Kemp and seconded by Mr. B. E. Walker:

That this meeting reaffirms the policy of the board in the direction of using its influence in the fostering of export and import trade by the Canadian railways and seaports—Canada for the Canadians. That the hearty thanks of this meeting be tendered to the president of the St. John, N.B., Board of Trade, Mr. W. S. Fisher, for the very valuable and instructive manner in which he has laid before us the claims of St. John N.B., as a Canadian winter port.

WHAT SHIPPERS DESIRE.

One of the members of the Board of Trade, who explained that he was a flour exporter, stated to Mr. Fisher that there were a few matters he would like to bring to the attention of the steamship companies. The first was that unless they could give quick transportation they should not take the freight; also, when the stuff was loaded shippers should be notified. The steamship companies should be asked, also, not to load flour with chain hoists, and not to make platforms of sack flour on the other side to unload other goods over, as was sometimes done.

Mr. A. E. Kemp, in moving the resolution, expressed the thanks of the Board of Trade to Mr. Fisher. He said the tendency now was to send our own produce via Canadian ports, and he thought shippers should pay more attention to St. John as a winter port.

A BANKER'S VIEW.

Mr. B. E. Walker, who seconded the resolution, said he thought Canadians had largely themselves to blame that more was not known about Canada. There was no question as to the desirability of shipping

goods via St. John in winter, but a business man must get just as good terms from there as he could obtain anywhere else. Canada desired that other countries should know her as one of the great shipping powers of the world, but for us to admit that we had no port from which we could ship goods in winter was an admission that we could not hold all the year round the position of a great shipping place.

Dr. Parkin, of Upper Canada College, referred to the fact that the Maritime Provinces had at first not prospered under Confederation, and the great effort St. John had made was really a struggle to get out of the depression that took place as a result of the changes of Confederation. He believed with Mr. Walker that Canada would never be able to take her proper place till she shipped goods through her own ports all the year round. People's views had changed very much lately in regard to the value of St. John as a winter port, and the results that would come from such a change of mind were well worth striving for. Dr. Parkin believed that the Government should back up St. John in its efforts, and grant it as much assistance proportionately as it was giving to Montreal. The motion was passed unanimously, and after Mr. Fisher had expressed his thanks to the members of the Board of Trade the meeting adjourned.

WROUGHT IRON VERSUS STEEL.

A correspondent of Iron Age writes: "Recent occurrences have again brought prominently to the front the much vexed question as to the comparative lasting qualities of wrought iron and Bessemer steel. It seems that wrought iron is much less susceptible to rust than steel, though the reason is not known. Whether it is the result of the process of manufacture or is inherent in the constitution of the steel is something at present involved in obscurity. It is claimed by the advocates of wrought iron that experience has demonstrated that under exactly similar conditions steel will not last nearly so long as the older metal, and that this is especially true in pipes and tubing, hinges, butts and bolts.

"It would be contrary to all experience to have revolutions go backward, but it is certainly an interesting fact to notice the sudden and great success of the iron cut shingling nail and the rapid way in which in some sections of the country it has displaced the wire shingling nail. It is a question that is of vital moment to the hardware trade and it should evoke expert opinions and the result of experience."

All the factories in Guelph are now busy, and several establishments are running overtime.

WILL ADOPT THE CASH SYSTEM.

T. P. McGillicuddy, general merchant, Harriston, Ont., has decided to adopt the cash system, and he announces it in the following pointed manner, in a local paper :

On the first day of December next, we will change our system of doing business, put away all books, sell only for cash or produce, and are thoroughly convinced that it will be more profitable for our customers as well as for ourselves. A storekeeper must have the same prices for everybody or he will be continually getting into trouble. If he charges the credit customer more than the cash customer, he will offend him and lose his trade, therefore he must charge the same prices to the one who pays in one month, one or two years, or the one who never pays, and it is impossible for him to do justice to his cash customers. His profits must necessarily be large enough to pay running expenses, interest on the accounts he carries in his books, and to cover his bad debts. We know from experience that the great majority of the people of Harriston and surrounding country are strictly honest, will pay for everything they get, and any storekeeper will never lose a cent by selling to them on credit. But those are the people who have everything to gain and nothing to lose by buying for cash and getting their goods at the lowest prices. Every town and country have their dead beats, and every business man doing a large credit business will have bad debts. Where does the money come from that makes up for bad debts? Do you honest people ever think of that? You are the people. When you pay your bills, or buy goods for cash, you pay for the bad debts the storekeeper makes. You are working hard to pay for what the lazy, worthless, extravagant dead beat eats and wears. After the first of December our customers will pay no high prices—will pay nobody's debts. We will buy and sell for cash, keep down expenses, and give them such good values that they will find it to their advantage to pay the cash and deal with us as in the past.

THE HARVEST.

So a small seed that in the earth lies hid
And dies, reviving, bursts her cloddy side,
Adorned with yellow locks, of new is born,
And doth become a mother great with corn,
Of grains brings hundreds with it, which, when
old,
Enrich the furrows with a sea of gold.

—Sir William Drummond.

A CABLE FOR TURK'S ISLAND.

Advices from Grand Turk state that a contract has been made between the British Government and the Direct West India Cable Company to lay a cable from Bermuda to that island. The cable ship Britannia arrived at Grand Turk from London on the 3rd inst., and the cable-house which she brought has been erected. She sailed yesterday morning for Jamaica to survey the route between the islands. The cable ship Scotia, with the cable on board, will leave London for Bermuda about the middle of December. It is supposed that the work will be completed by the end of January. It is expected that Grand Turk will then become a port of call for vessels seeking freights. The port charges on vessels calling for orders will be nil. It is said that the rate to England will be 3s. per word, and 2s. to Bermuda, Jamaica and Halifax. —N.Y. Journal of Commerce, Nov. 17.

BASKETS THAT KEEP TRADE

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Chas. Boeckh & Sons
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Crystal Glass - \$5.50 List
Sugar Shell extra.

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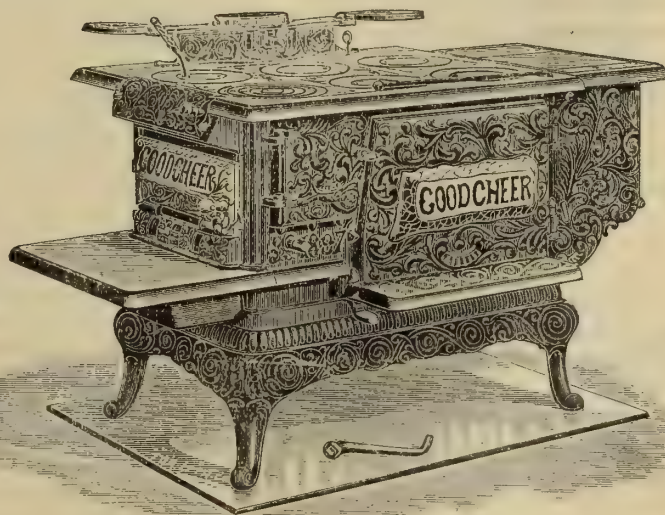
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Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

JAMES S. FAIRLEY, general merchant and miller, Boiestown, N.B., is offering to compromise.

W. C. Norman, manufacturer of spring beds, Montreal, has assigned.

R. A. Logan & Co., general merchants, Bridgewater, N.S., have assigned.

J. A. Francis, general merchant, Essex, Ont., has assigned to Chas. F. Lobb.

James E. Clair, general merchant, Clair Station, N.B., is offering to compromise.

E. Duckett, general merchant, St. Gregoire, Que., is offering 40c. on the dollar.

An assignment has been demanded of Wm. Genereux, general merchant, Grand Piles, Que.

Picotte & Fils, contractors, Montreal, have filed a contestation of a demand of assignment.

An assignment has been demanded of Pierre Gelin, general merchant, St. Alexis de Monts, Que.

Louis Bouchard, general merchant, St. Paul's Bay, Que., has been granted an extension of time.

Paradis & Jobin have been appointed curators of Epiphane McGee, general merchant, Rimouski, Que.

Pearce & Co., general merchants, Mitchell, Ont., have assigned to E. A. Lye, Toronto, and a meeting of creditors will be held on the 26th inst.

Wm. Kennedy, of Bowman, Kennedy & Co., wholesale hardware and coal dealers, London, has made application for the appointment of a receiver.

J. R. Jaynes & Co., general merchants, Alvington, Ont., have assigned to John G. McIntosh, and their stock is advertised to be sold by auction on the 29th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

Gagnon, Spragge & Co., manufacturers' agents, Montreal, have dissolved.

Partnership has been registered under the firm name, E. Gauthier & Co., contractors, Montreal.

Pozer & Carter, general merchants, Duck Lake, N.W.T., have dissolved, Mr. Pozer continuing.

Robert Murdock, general merchant, Hepworth, Ont., has been succeeded by Murdock & McKenzie.

Delacour & Aumont have commenced business as general merchants in St. Pierre et Miquelon, Newfoundland.

SALES MADE AND PENDING.

R. T. Daley, blacksmith, etc., Iris, Ont., has sold out to Isaac Broadway.

B. Tripp, harness dealer, Thorndale, Ont., is advertising his business for sale.

The mill, machinery, etc., belonging to estate of S. McAdam, manufacturer of

shingles, South River, Ont., is advertised to be sold by auction on the 27th inst.

George Weston, blacksmith, Kintore, Ont., is advertising his business for sale.

R. W. Neville, general merchant, Port Colborne, Ont., is advertising to sell out.

The Mount Royal Milling and Manufacturing Co., Victoria, B.C., is advertising its business for sale.

The stock of Drouin & Trudel, general merchants, Abenakis, Que., has been sold at 65 1/2 c. on the dollar.

The stock of E. Cloutier, general merchant, Notre Dame du Lac, Que., has been sold at 57 1/2 c. on the dollar.

The stock belonging to the estate of W. H. Thomson, general merchant, Schreiber, Ont., is advertised for sale by tender.

The stock belonging to the estate of G. A. Marion, general merchant, Rockland, Ont., is advertised to be sold by auction on the 29th inst.

CHANGES.

George McKenny is opening out as general merchant in St. Laurent, Man.

Thomas Cole, general merchant, is moving from Strathroy to Glencoe, Ont.

Robert Smith is commencing business as a general merchant in Glencairn, Man.

Ant. Gosselin, carriage maker, Lyster, Que., has closed down and left the town.

W. S. Cameron, is starting business as general merchant in Indian Head, N.W.T.

Taylor, Telfer & Co., dealers in electrical supplies, have commenced business in Montreal.

S. Colclough, general merchant, Cum-nock, Ont., has been succeeded by L. Flewelling.

FIRES.

The saw mill of Pierre Fortin, St. Henri de Montreal, has been burnt out; no insurance.

The plant of the Rivington Cutlery Co., Montreal, has been slightly damaged by fire; insured.

A. J. Campbell and John McKellar, both general merchants, Tiverton, Ont., have been burned out.

CRACKS IN CIRCULAR SAWS.

IN the September number of The Lumberman is a well considered and interesting article on this subject, writes Theron J. Hiles in Age of Steel. After reading of the various causes of cracks in small circular saws, there mentioned, I am desirous of calling attention to another source of this evil. It is found in the sensitiveness of high-grade steel to heat, and the great force with which it will expand and contract under varying temperatures. This expansion and contraction is positive in its action. For every degree of heat added there is a definite amount of expansion. The contrac-

tion, however, lags, and will stop short of its starting point. This is to say, by way of illustration, that if the expansion of a given piece of steel when heated from 60 degrees Fahrenheit to a red heat was one-fourth of an inch, the contraction, when it was cooled down again to 60 degrees, would not be quite one-fourth of an inch.

There are two ways in which this effect of heat on steel is manifested in circular saws—besides being responsible for cracks. One can be noted in the change in the tension, which is doubtless a familiar one to most sawyers. Another can be observed in saws, especially those of heavy gauge, which have been heated to a degree which causes a dark blue or a black spot. Careful examination will show that such spots are thicker than the metal surrounding them. Further tests would show that the temper of such spots was greatly modified and this is also involved in the expansion, as the same piece of steel is not of the same dimensions at a high and low temper.

But to return to the subject of cracking. How much heat is developed in a saw while cutting is problematical, but under some circumstances it no doubt reaches 400 deg. Fahrenheit. Crosscut saws give the most trouble by cracking. As we shall see, they are under special provocation to do so. If the rim of a cut-off saw became heated during a cut, or a series of cuts made in close succession, what occurs as soon as it is out of the cut? It begins to cool off, rapidly at the teeth, much more slowly just below. It is a well established principle that heat escapes from any projecting points on a metal body much more freely than it can from a plain surface, and especially a bright polished surface. The teeth rushing through the air lose their heat faster than the plate just below their base. This unequal cooling sets up a severe strain in the saw blade. The fast cooling teeth are contracting over a plate which is expanded beyond its normal dimensions. This contraction proceeds, in many instances, with so much force that small checks are made at the sharp corners at the bottom of the teeth. These sharp corners render the steel less resisting at these points, on the same principle that nicking a bar of iron all round with a cold chisel weakens it so that it may be easily broken.

These small checks, when first made, are sometimes so fine that they escape notice, but the labor of sawing soon extends them into the body of the plate. Where a crack is developed in a saw and a hole is drilled at the bottom of it, the strain when heated again may be concentrated at the bottom of the first crack and cause it to extend further into the body of the plate.

Rip saws seldom show cracks due to heating. There are several reasons for this, based upon the size and shape of the teeth, and the manner of use.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties
COOKE HARDWARE CO.
HAMILTON, ONT.

McDONALD & ALLEN
KINGSTON
Manufacturers of
Door Knobs, Japanned, Nickel, Silver and
Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..
Paint and
Varnish Works

.. Manufacturers of ..
PAINTS, COLORS AND VARNISHES.
WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of
SCREWS and
BICYCLE PARTS
in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.
The ...
John Morrow Machine Screw Co.
Ingersoll - Ontario.

The Niagara Falls
Metal Works Company, Limited
Niagara Falls - Ont., Canada
MANUFACTURERS

Brass Foundry, Brass Finishing,
Light Drop Forging, Malleable
Iron Foundry, Wire Chains,
Safety Chains, Plumbers' Chains,
Cut Link Steel Chains. Articles
cut, formed and stamped from
Sheet and Band Steel, Iron, Brass,
Copper, German Silver and Alu-
minum. Close Plating and Elec-
tro-Plating.

GERMAN GLASS INDUSTRY IN 1897.

The German glass industry has experienced considerable development during the last few years. Imports have been reduced, while the export has grown to respectable proportions. The imports for the first six months of 1897 amounted to 7,188.6 metric tons, valued at 5,331,000 marks, as against 7,034.3 tons, valued at 4,906,000 marks, in the corresponding period of 1896. This is an increase of 151.3 tons, or 2.1 per cent., in weight, and 425,000 marks, or 8.7 per cent., in value. The difference in the increase of weight and value is explained by the fact that more articles of luxury were imported. The bulk of the imports came from Belgium and Austria. The export for the first half of 1897 amounted to 56,905.6 tons, valued at 22,593,000 marks as against 60,683.3 tons, valued at 22,702,000 marks, in the corresponding period of 1891, a decrease of 3,777.7 tons, or 6.2 per cent., in weight, and 209,000 marks, or less than 1 per cent., in value. These figures show that the decrease applies mainly to cheaper goods. The exports to the different countries were as follows:

	Metric tons	Per cent.		Metric tons	Per cent.
Great Britain	16,338.4	28.7	France	3,323.2	5.7
Belgium	5,374.2	9.4	Chili	2,284.2	4.0
United States	4,254.2	7.5	Argentina	1,973.6	3.4
Holland	3,404.5	5.9	Switzerland	1,854.3	3.2

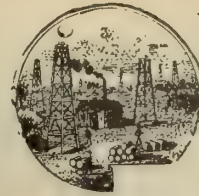
Most of the glass was exported to countries with which Germany concluded commercial treaties recently. In the first half of 1897 the exports exceeded the imports by 49,720 tons in weight and by 17,262,000 marks in value.— American Manufacturer.

STEAMER ROUTE TO CHANGE.

The Owen Sound Times last week said that information had been received to the effect that next season the steamers of the Ogdensburg Transportation Co., eight in number, would run between Chicago, Duluth and Parry Sound, Ont., instead of between Chicago, Duluth and Ogdensburg, N.Y., as formerly. The Times says this and the improved facilities for the transportation of freight in Parry Sound will make that place Owen Sound's only rival for the commercial metropolis of the Georgian Bay, and that next season there will be a larger fleet of vessels on Georgian Bay than ever before.

Lambton county has two fields of wheat each of 100 acres, upon which have been grown fine crops. The Petrolia Advertiser says they presented a fine appearance this fall.

A story is told of the late Baron Hirsch that conveys a valuable lesson. After writing a message announcing the gift of a fortune to a school, the great millionaire went over the telegram carefully a second time, condensing it so as to save a franc.



VanTuyl & Fairbank
Petrolia, Ont.
Headquarters for ...
Oil and Artesian Well
Pumps, Casing, Tubing,
Fittings, Drilling
Tools, Cables, etc.



BROOM AND CORDAGE WORKS.
WELFORD BROS.

Manufacturers of
Brooms and Whisks, Leather, Web
and Rope Halters, Rope Cattle Ties
Cordage and Twines.
LONDON



IRON FENCING
and all kinds of
Iron, Wire and Brass
Work
Address—
Toronto Fence and
Ornamental Iron Works
(Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of
Stove Trimmings, Piano and Organ Trimmings,
Piano Stool Feet, Novelities, etc. Bicycle Work
a specialty. Special attention given to Job
Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.
Quotations gladly given.



COVERT MFG. CO.
West Troy, N.Y.
DERBY SNAP

Canadian Patent, April 3, 1897.
With Plated Rust Proof and Guarded
Spring. "The Latest and Best." Sold
by all Leading Jobbers in Canada.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales
made and repaired.

Write for Catalogue.



"JARDINE"
TIRE UPSETTERS
WILL UPSET TIRES

Some machines sold as Upsetters will not.
Perhaps you make as much money on the
sale of a useless Upsetter as on a good
one, but your customer does not. He
don't want a machine because it is called
an Upsetter; he wants a machine to upset
tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

HEATING DEFECTIVE BUILDINGS.

SOME buildings are so badly constructed that it is impossible to warm them to a temperature of seventy degrees Fahrenheit, the outside temperature being below zero. When surveying a building for the purpose of making a proposition to heat it, its construction should not be overlooked, says Domestic Engineering. Outside brick walls are sometimes plastered upon the brick. A construction of this description is difficult to heat. It will require a very large heating apparatus to warm a room with walls of this description. The cooling effects of these walls require an abundance of hot air to overcome—in fact, it is not overcome with the ordinary furnace work of the present day. Outside stone or brick walls should be lathed upon strips of wood not less than one inch thick, so that an air space may be left between wall and plaster. This will insure a dry and comparatively warm wall, reducing to a large degree the loss of heat that must necessarily take place in a building with exposed walls plastered upon the brick.

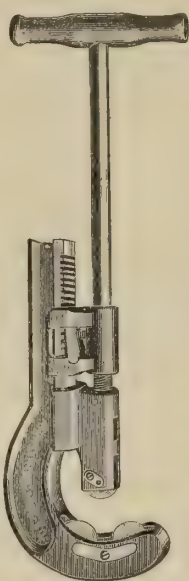
Loose-fitting doors and windows, a common fault in cheaply constructed buildings, is another cause of failure in house heating. This defect, like the cheap built wall, cannot be laid at the door of the heating contractor, but when he draws the owner's attention to these defects and lays the blame for the non-fulfilment of his guarantee upon the bad construction of the building, he is told that he had an opportunity to examine the building and accepted it in its present condition, therefore he must carry out the guarantee and warm the building as agreed. This is a state of affairs to be avoided, for there is no way out of a difficulty of this kind that does not entail loss and trouble to the furnace man and considerable annoyance to his customer.

It is perhaps impossible to do a heating business and have easy sailing all the time. Heating men do not expect it, for let them do their work ever so well, there are cranks to be dealt with who would not be satisfied with the best job that money can purchase. Failure in heating buildings is caused by men doing a heating business who are deficient in knowledge of the requirements needed to make a successful heating system, and by experts in the business, through

being too hasty in their examination of a building or too eager to close a contract, taking the job at a low figure and trying to carry it through at a profit, with the usual results—an unsatisfactory heating plant and a condemned furnace.

A NEW ARMSTRONG PIPE CUTTER.

The engraving shows an improved form of the No. 3 pipe cutter manufactured by the Armstrong Manufacturing Co. This



New No. 3 Armstrong Pipe Cutter.

tool, it is claimed, is the strongest and most rapid working pipe cutter on the market, and it is also the cheapest, by reason of its taking a larger range of pipe than any tool known that is made for a like purpose, viz., from 1½ inches to 4 inches, inclusive.

The change from the smallest to the largest size is made by simply raising a pawl and allowing the hooked bar to slide outward. To change to a smaller size, the hooked bar is pushed in to the required size, when it is ready to cut.

The thread on the handle is only used to follow up the cut as the cutter is revolved about the pipe.

This cutter may be changed from a three-wheel to a one-wheel cutter by simply substituting rollers in place of the two cutter wheels at the end of the hooked bar.

Full information will be furnished upon

application at the home office of the Armstrong Manufacturing Co., Bridgeport, Conn., U.S.A.

THE BEST FUEL GAS.

The president of the American Gas Light Association in his opening address at the annual meeting of the association, held at Fort Monroe, Va., made some interesting statements regarding gas as fuel. In the speaker's State Legislature there had been a warm discussion as to the relative value of illuminating coal gas and of blue water gas. The matter had eventually been decided in favor of the illuminating gas, the following table, the correctness of which was generally admitted, proving the superiority of illuminating gas as fuel gas:

A gross ton of coal contains, in round figures.....	31,000,000 heat units.
When put through the plant used by producers of blue water gas it produces 50,000 feet of gas of 300 heat units per foot	15,000,000 heat units.
Loss in going through the plant, over.....	50 per cent.

Figuring in the same way, a ton of coal put through a coal gas works will contain 31,000,000 heat units, and will produce:

11,000 feet of gas of 650 heat units per foot, or	7,150,000 heat units.
1,200 pounds of salable coke under the best conditions of regenerative furnaces, at 14,000 heat units per pound.....	16,800,000 heat units.
130 pounds of tar and 180 pounds of ammoniacal liquor, and their cash value, is greater than that of the weight of coal they represent. Inasmuch as this gives a gain economically, it is fair to charge up their actual weight at least in heat units—310 pounds at 14,000... ..	4,340,000 heat units.
Total heat units available for use.....	28,290,000 heat units.
A loss of 2,710,000 heat units; or 8.74 per cent.	

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power)

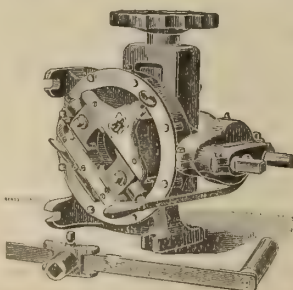
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office.
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

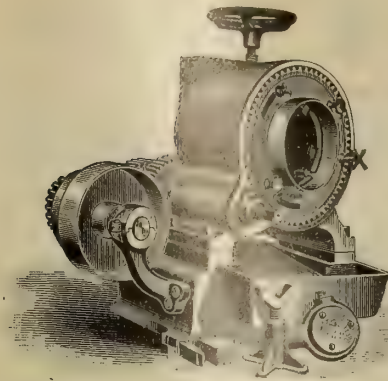
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

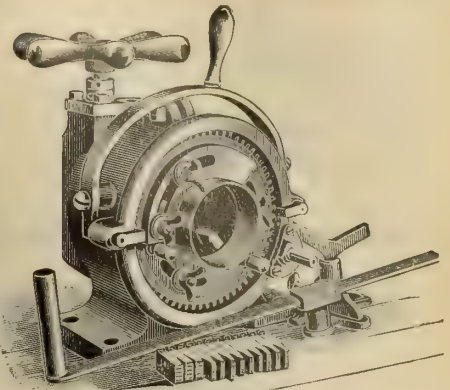
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

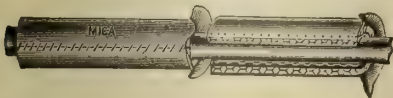
T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

H.O. CANFIELD - BRIDGEPORT, CT.

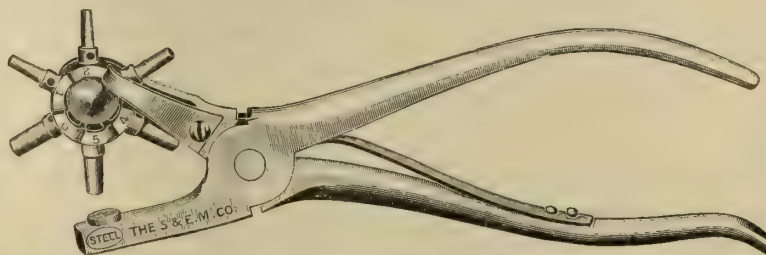
Hardware, Plumbers' and Bicycle Specialties.

OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897
CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian **HARDWARE**
AND **METAL**.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

LEAD POISONING FROM DOMESTIC WATER SUPPLY.

In an exchange is given a case of lead poisoning which occurred in a forester's lodge situated in a bathing resort in the mountains. The supply of water was formerly taken from a spring, distant about 50 m. or 60 m. from the house, but for the sake of convenience a pump was fitted up in the house and a lead suction pipe was connected with the spring. It came out in the evidence that the plumber, in laying the pipe, allowed a lot of the lead filings to remain in the joints, soldered in the usual way. A very few days after the completion of the work the daughter of the forester fell ill, and subsequently the mother and the father suffered acutely from colic. Finally the girl died; lead poisoning was diagnosed, and a Government inquiry was instituted

into the water supply. The post-mortem had demonstrated the presence of lead in several of the organs, and the water, which was extremely pure, was found to contain 0.95 mg. of dissolved lead per liter (about $1\frac{1}{2}$ grains per quart). The degree of hardness was only 1.4.

PLUMBING CONTRACTS.

Fiddes & Hogarth, Toronto, have plumbing contracts for residences on Brooklyn avenue and Bellwoods avenue and for an office on Balmuto street, Toronto.

Guest & Co., Toronto, have contracts for the plumbing of a house for Mr. F. Anderson, Little York; of a residence for Mr. A. McDonald, Ontario street, Toronto, and for the plumbing, gas fitting, etc., of the Union

Block, Toronto and Adelaide streets, Toronto. They are also building a hydraulic water motor for an organ for Mr. Ed. Lye, organ builder, Toronto.

PLUMBING AND HEATING NOTES.

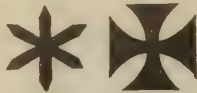
Pelletier & Lord have commenced business as plumbers and stove dealers in Montreal.

The City Council of London, Ont., has accepted the tender of A. J. Brown, Toronto, for the laying of two miles of sewer. The contract price is \$39,060.

S. Hill has taken out a permit for the erection of two brick cottages on Barton street east, Hamilton, to cost \$1,000.

Stewart McPhie has taken out a permit for a brick store and dwelling at Earl and Barton streets, Hamilton, to cost \$2,200.

CORPORATE MARK



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS.

TORONTO, Nov. 26, 1897.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits

Tin Plates.

Charcoal Plates—Bright.

J. L. S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X., " 6 25
I.X.X., " 7 50
J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X., " 4 25
I.X.X., " 5 00
I.A.X.X., " 5 75
D.C., 12 1/2 x 17 3 00
D.X., " 3 75
D.X.X., " 5 75

NOTE.—Other brands might be shaded by 25c per box.
Coke Plates—Bright.
Hessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base... 3 15
20x28. 6 25
Charcoal Plates—Terne.
Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Terne Tin 7 50
I.X., Orion 7 50
Charcoal Tin Boiler Plates.
Cookley Grade—
X.X., 14x56, 50 sheet bxs } Per lb.
" 14x60, " } 0 05 1/2 0 06
" 14x65, " }
Tinned Sheets.
72x30 up to 24 gauge. 0 06 0 06
26 " 0 06 1/2 0 07 1/2
28 " 0 07 1/2 0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs 1 50 1 55
Refined " 1 80
Horse Shoe " 1 75
Band " 2 00
Hoop " 4 00 4 25
Swedish " 2 50
Sleigh Shoe Steel 2 50
Tire Steel 2 75 3 00
Machinery " 0 10 0 14
Cast Steel, per lb 0 10 1/2 0 11
Russian Sheet, per lb 2 00 2 25
Tank Plates, 1-5 and thicker. 2 00 2 50
Boiler Rivets 4 50 5 00
Base Price
1 1/2-inch 0 06 1/2
2 " 0 07 1/2
2 1/2 " 0 09 1/2
3 " 0 11
Steel Boiler Plate.
3-16 inch 2 00
" 1 90

Boiler Tubes.

1 1/2-inch 0 06 1/2
2 " 0 07 1/2
2 1/2 " 0 09 1/2
3 " 0 11

Steel Boiler Plate.

3-16 inch 2 00
" 1 90

3/8 inch and thicker..... 1 75

Sheet Iron.

16 gauge and heavier..... 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 35 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 30
All bright 2 90

Iron Pipe.

Wrought, 1/4 to 3/8 inch, \$1.87; 1/2 inch, \$2.35;
3/4 inch, \$2.87; 1 inch, \$3.87; 1 1/4 inch,
\$3.10; 1 1/2 inch, \$6.38; 2 inch, \$9.25 per
100 feet.
Galvanized, 1/2 inch \$4 to \$4.25, 3/4 inch \$4.80
to \$5, 1 inch \$6.75 to \$7, 1 1/4 inch \$9.25 to
\$9.62 1/4, 1 1/2 inch \$11.75 to \$12.25 per 100
feet.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge 0 03 1/2
18 to 24 gauge 0 03 1/2
26 " 0 04 1/2
28 " 0 04 1/2

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 5-16 " " 4 75 4 00
" 7-16 " " 3 75 3 35
" 9-16 " " 3 25 2 95
" 1 1/4 " " 2 85 2 75
Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 11 1/4 12
Lake Superior
Bolt or Bar.
Cut lengths, round, 1/2 to 3/4 in.
round and square
1 to 2 inches 0 18 0 19
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.
Planished and tinned, 14x48
and 14x60 0 25 0 27
Braziers. (In sheets.)
4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " 0 15 1/2 0 16 1/2
" 50 lb. and above, " 0 15 0 16

Boiler and T. K. Pitts.

Plain Tinned, per lb 0 21
Spun, per lb. 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list.

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
ests, hard-rolled, 2x4 ... 0 20

Zinc Spelter.

Foreign, per lb 0 04 3/4 0 05
Domestic " 0 03 3/4 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/4
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb. 0 04 1/2
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 04 1/2 0 04 1/2
Sheets, 3 to 6 lbs., per sq. ft.,
by roll. 0 04 0 04 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 27 1/2 per cent. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Bar half-and-half Per lb. Per
Standard 0 11 0 11 1/2
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal.

"Beaver" brand \$0 20
"Tandem" A 0 19
"B. 0 16
"C. 0 10 1/2

White Lead.

Pure, Assoc. guarantee, ground in oil, Per cwt
25 lb. irons 5 50
No. 1 do 22 1/2
No. 2 do 4 37
No. 3 do 4 75
No. 4 do 4 04
Brandram's B. B. Genuine 7 50
"No. 1 6 75
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
"No. 1 6 20

Prepared Paints.

(In 1/2, 1/2 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 05
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
"Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J. F. L. S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
"Umber, " 0 09
"do. 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2

Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs.
25-lb. Irons ..
-lb. Boxes

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 10
Extra do. 2 50
Body Varnish 4 60
Furniture Varnish 0 65
Extra do. 0 90
Demar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net 0 42 0 43
Boiled, per gal. net 0 45 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net 0 48
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lot 0 11

Cod Oil, Etc.

Cod Oil, per gal. 0 50 0 55
Pure Olive 1 20
"Neatsfoot" 90

Glue.

(In bbls.)
Common 0 07 1/2 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
All clear 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 t
30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Mil-
itary, Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B. B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin	
Best thick white felt wadding, in ½-lb bags, 1 00	per lb
Best thick brown or grey felt wads, in ½ lb. bags, 0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges, 0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge, 0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge, 0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges, 0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge, 0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge, 0 25	
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M
11 and smaller gauge, 0 60	
9 and 10 gauges, 0 70	
7 and 8 gauges, 0 90	
5 and 6 gauges, 1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge, 1 15	
9 and 10 gauges, 1 40	
7 and 8 gauges, 1 65	
5 and 6 gauges, 1 90	
Anvils.	
Per lb, 0 10	0 12½
Anvil and Vice combined, each, 4 50	
Wilkinson & Co.'s Anvils, lb, 0 09	0 09½
Wilkinson & Co.'s Vices, lb, 0 09½	0 10
Augers.	
Gilmour's, discount 65 p.c. off revised list.	
Hollow Stearn's, per dozen, 13 00	20 00
Adjustable Stearn's, each, 5 50	6 50
Post-hole, Vaughan's, each, 1 35	1 60
Excelsior, Jennings', discount 50 per cent.	
Awls.	
Sewing, per gross, 0 65	1 59
Pegging, " 0 65	1 25
Brad, " 0 85	1 60
" handled, per gross, 3 60	30
Saddler's, per gross, 0 45	1 60
Awl Hafts.	
Patent Peg, oss, 7 25	8 00
Sewing, per gross, }	
Awl and Tool Sets.	
Millar's Falls, per doz., 2 80	3 30
AXES.	
Splitting Axes, 5 25	5 50
Chopping Axes—	
Black Prince, 7 25	7 50
Forest Clipper, 7 25	7 50
Lance, 8 50	9 00
Mann's, 8 00	8 25
Maple Leaf, 9 50	10 00
Hand Made, 7 50	7 75
Climax, 8 00	8 25
Phantom, 8 25	8 50
Axle Grease.	
Per gross, 6 00	13 00
Bath Tubs.	
Zinc, discount, 3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list	
Steel clad, 20 per cent. discount off revised list.	
Boxing extra	
Bells.	
Hand.	
Brass, 60 per cent.	
Nickel, 55 per cent.	
Door.	
Gon Sargent's, 5 50	8
" Peterboro', discount 50 per cent.	
Cow.	
American make, discount 66½ per cent.	
Canadian, discount 45 and 50 per cent.	
Farm.	
American, each, 1 25	3 00
House.	
American, per lb, 0 35	0 40
Bellows.	
Hand, per doz., 3 35	4 75
Moulders, per doz., 7 50	10 00
Blacksmiths', discount 60 per cent.	
Belting.	
Extra, 40 and 10 per cent.	
No. 1, leather, discount 60 per cent.	
Standard, 55 per cent.	
Agricultural, 65 and 5 p.c.	
Bench Stops.	
Per doz, 5 00	6 00
Bits.	
Auger.	
Gilbur's, discount 65 and 5 per cent.	
Excelsior, discount 60 per cent.	
Rockford Common, 65 to 65 and 5 per cent.	
" Perfection, 50 and 10 per cent.	
Jennings' Gen., net list to 5 p.c. discount.	
Car.	
Gilmour's, 47½ to 50 per cent.	
Expansive.	
Clark's, per cent.	
Excelsior, 10 per cent.	
Gimlet.	
Clark's, per doz, 0 65	0 90
Diamond, Shell, per doz, 1 00	1 50
Nail and Spike per gross, 2 25	5 20

Blind Rollers.	
Annex, per doz, 1 25	1 75
Mascoat, " 1 35	1 85
Geminie, " 1 12	1 20
Blind and Bed Staples.	
sizes, per lb, 0 7½	0 12
Bolts.	
Carriage, dis., 70 p.c. off new list	
Tire, dis., 70 and 5 per cent.	
Stove dis., 70 per cent.	
Elevator, dis., 45 to 40 per cent	
Machine, dis., 70 p.c.	
Coach Screws, dis. 80 p.c.	
Boring Machines.	
Complete, with augers, each, 5 00	7 50
Braces.	
Barber's, 6 00	7 75
Barber's Ratchet, 10 00	11 00
Farmers, 2 00	2 75
Millar's Falls, 15 50	29 00
Brackets.	
Shelf.	
Japanned Canadian, per doz.	
pairs, 0 50	3 40
Berlin Bronze Canadian, 0 85	3 20
Broilers.	
Light, dis., 65 to 67½ per cent.	
Reversible, dis., 65 to 67½ per cent.	
Vegetable, per doz., dis. 37½ per cent.	
Henis, No. 8, " 6 00	
Henis, No. 9, " 7 00	
Queen City, " 7 50	10 00
Butchers' Cleavers.	
From 8 to ch, per doz, 4 23	
Butts.	
Brass.	
Wrought Brass, dis., 17½ p.c. revised list.	
Cast Iron.	
Loose Pin, dis. 70 per cent.	
Wrought Steel.	
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.	
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.	
Berlin Bronzed, dis. 70, 70 and 5 per cent.	
Gen. Bronzed, per pair, 0 40	0 65
Can Openers.	
Acme, per gross, 9 00	10 00
Sardine Scissors, per doz, 3 75	4 50
Card.	
Horse, per do, 0 60	1 00
Carpet Stretchers.	
American, per doz, 1 00	50
Bullards, per doz, 6 50	....
Carpet Sweepers.	
Bissell, per doz, 22 50	
World, " 21 75	
Daisy, " 24 00	
Star, " 18 00	
Crown Jewel, per doz., 29 00	
Grand Rapids, " 24 00	33 00
Cartridges.	
(See Ammunition.)	
Castors.	
Bed new list, dis. 55 to 57½ per cent.	
Plate, dis. 52½ to 57½ per cent.	
Cattle Leaders.	
Nos. 31 and 32, per gross, 8 50	9 50
Cement.	
Canadian, Portland, 2 50	
English, " 2 50	
Belgium, " 2 35	
Canadian hydraulic, 1 10	
Figures are for barrel lots.	
Chalk.	
Carpenters' Colored, per gross, 0 45	0 75
White lump, per cwt, 0 60	0 65
Red, " 0 05	0 06
Crayon, per gross, 0 14	0 18
Chisels.	
Socket, Framing and Firmer.	
American, dis. 75 to 77½ per cent.	
Canadian, dis. 50 and 10 per cent.	
Tanged firmer, per doz, 0 85	4 00
Churns.	
Daisy or Leader, dis. from stock or factory	
60, 10 and 10 per cent.	
Steel, net, 3 00	
Clamps.	
Judds', dis. 20 per cent.	
Stearns, per doz, 3 00	10 00
Clips.	
Axle dis. 65 per cent.	
Coffee Mills.	
Box, 3 60	13 00
Side, 3 60	4 00
Enterprise, No. 0, 1 35	
No. 2, 70	
Compasses, Dividers, Etc.	
American, dis. 62½ to 65 pe cent	

Cradles, Grain.	
Canadian dis. 25 per cent.	
Dies.	
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.	
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.	
Door Springs.	
Torrey's Rod, per doz., (15 p.c.) 2 00	
Coil, per doz, 0 88	1 60
English per doz., 2 00	4 00
Draw Knives.	
American, dis. 70 and 10 per cent.	
Canadian, dis. 25, 50 and 10 per cent.	
Drills.	
Hand and Breast.	
Millar Falls, per doz., 16 00	51 50
P. S. & W., dis. 40 per cent.	
DRILL BIT.	
Morse, dis. 37½ to 40 per cent.	
Standard, dis. 50 and 5 to 55 per cent.	
ELBOWS.	
Stovepipe.	
Per doz, 75	1 70
Enameline.	
No. 4—3 dozen in case, \$4 50	
No. 6—3 dozen in case, 7 50	
FAWCETS.	
Cork Lined, per doz., 0 30	0 35
Wine, per doz., 1 30	3 25
Star, 2 80	3 90
Fenn's Corkstops, No. 2, per dozen, 1 70	
Petroleum, per doz., 4 50	6 50
FILES AND RASPS.	
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.	
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.	
Black Diamond, 50 and 10 to 60 per cent.	
Kearney & Foote, 60 and 10 per cent. to 60, 10 5.	
Nicholson File Co., 50 and 10 to 60 per cent.	
Heller's Horse Rasps, 50 per cent.	
Jowitt's, English list, 25 to 27½ per cent.	
American, 60 to 60 and 5 per cent.	
Great Western, 60 and 10 per cent.	
FLUTING MACHINES.	
Each, 0 60	2 00
FORKS.	
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.	
FREEZERS	
Ice Cream.	
Gem from \$1.25 to \$7 net.	
White Mountain, dis. 50 p.c.	
Arctic, dis. 50 p.c.	
FRUIT PRESSES.	
Henis, per doz., 3 25	3 50
Enterprise, dis. 10 per cent.	
Shepard's Queen City, dis. 15 per cent.	
FRY PANS.	
Acme, dis. 65 to 67½ per cent.	
GAUGES.	
Marking, Mortise, Etc.	
Stanley's, dis. 50 to 55 per cent.	
Wire Gauges.	
Winn's, Nos. 26 to 33, each, 1 65	2 40
GLASS.	
Window.	
Box Price.	
Star, 50 ft.	Per 100 ft.
Double Diamond, 100 ft.	Per 100 ft.
Under 25 Inches, 1 35	2 60
26 to 40, 1 50	2 90
41 to 50, 3 30	4 15
51 to 60, 3 60	5 50
61 to 70, 3 90	6 35
71 to 80, 4 30	6 90
81 to 85, 4 85	7 70
86 to 97, 9 10	
91 to 95, 9 90	
96 to 100, 11 50	
101 to 105, 13 50	
106 to 110, 15 75	
GLUE POTS.	
Tinned, each, 0 36	
Enamelled each, 0 55	
GRINDSTONE FIXTURES	
P. S. & W., per doz., 3 60	4 00

HAMMERS.	
Nail	
Maydole's, dis. 5 to 10 per cent.	Can., dis. 25 to 27½ per cent.
Tack.	
Magnetic, per doz., 1 10	1 20
Sledge.	
Canadian, per lb, 0 07½	0 08½
Ball Peen.	
English and Can., per lb., 0 22	0 25
HANDLES.	
Axe, per doz., net, 50	2 60
Store door, per doz, 1 00	1
Chest, per doz. pairs, 0 40	2 50
Chisel.	
Firmer, per gross, 3 00	4 50
Socket Firmer, per gross, 3 25	8 00
Socket Framing, per gross, 3 75	5 00
Fork.	
C. & B., dis. 45 per cent. rev. list.	
Hoe.	
C. & B., dis. 45 per cent. rev. list.	
Saw.	
American, per doz., 1 00	1 25
Plane.	
American, per gross, 3 15	3 75
Hammer and Hatchet.	
Canadian, 45 per cent.	
Cross-Cut Saw.	
Canadian, per pair, 0 15	0 0
HANGERS.	
Door, 4 and 5 inch, per pair, 0 40	
Lanes, 50 to 50 and 5 per cent.	
HATCHETS.	
Canadian, dis. 40 to 42½ per cent	
HINGES.	
Blind, Parker's, dis. 60 and 10 to 65 per cent.	
" Shepard's Noiseless, dis. 60 per cent.	
" Buffalo, dis. 60 to 70 p.c.	
Light T and strap, 70 and 10 p.c.	
Heavy, per lb, 0 03½	0 04½
Screw hook and hinge—	
6 to 12 in., per 100 lbs., 3 15	
14 in. up, per 100 lbs., 2 35	
Screw, Eureka, 1 13	1 80
Gate, Clark's, 1 50	2 20
" Shepard's, dis. 50 to 60 per cent.	
Spring, 1 00	3 50
" Shepard's Samson, 1 10	1 20
HOES.	
Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 lis	
Planter, per doz, 4 00	4 50
HOOKS.	
Cast Iron.	
Bird Cage, per doz, 0 50	1 10
Clothes Line, per doz, 0 27	0 63
Harness, per doz, 0 72	0 88
Hat and Coat, per gross, 1 00	3 00
Chandelier, per doz, 0 50	1 00
Wrought Iron.	
Wrought Hooks and Staples, Can., dis. 47½ per cent.	
Wire.	
Hat and coat, dis. 60 to and 10 p.c.	
Belt, per 1,000, 0 60	2 70
crew, bright, Eng., dis. 60 per cent.	
HORSE NAILS.	
Canadian, dis. 50 p.c.	
Canada Horse Nail Co. "C" brand f.o.b. Montreal 50 p.c.	
HORSE SHOES.	
F.o.b. Toronto and Hamilton 3 35	
Steel, " 4 85	5
F.o.b. Montreal 10c. less, and London more than above.	
ICE PICKS.	
Star per doz, 3 00	3 25
KETTLES.	
Brass spun, 7½ p.c. dis. off new list.	
Copper, per lb., 0 30	35
American, 60 and 10 to 65 and 5 p.c.	
KEYS.	
Lock, Can., dis. 50 p.c.	
Cabinet, trunk, and padlock, Am. per gross, 1 60	
KNOBS.	
Door, japanned and N.P., pe doz, 0 65	3 00
Bronze, Berlin, per doz, 2 75	3 25
Bronze Gem, 6 00	9 00
Sava, 8 75	10 0
Shutter, porcelain, F. & L. screw, per gross, 1	

KNIVES.			Bailey's (Stan. R. & L. Co.), 50 per cent.			SCALES.			Leather carpet tacks			65
Clausen, bread, cake, and paring knives, \$7.00			Miscellaneous, dis. 25 to 27½ per cent.			Gurney Scales, 50 p.c.			Trunk nails, black and tinned			70
doz. sets net. to 10 per cent.			Bailey's Victor, 25 per cent.			B. S. & M. Scales, 50 p.c.			Clout nails			65
Christie, \$7.00 net.			PLANE IRONS.			Champion 60 per cent.			Cigar box nails			45
Hay knives, spear point, L or T handle, 60			English, per doz. 2 00 5			SCRAPERS			Lining nails in papers			10
to 60 and 10 per cent.			PLIERS AND NIPPERS.			Box, per doz. 2 10 4 50			" " in bulk			15
Lightning, per doz. 6 50 8 40			Button's Genuine, per doz. pairs, dis. 37½			Boot, " " " " 0 40 3			" " solid heads, in bulk			60
Heath's, 52½ p.c.			40 p.c.			SCREENS.			Saddle nails in papers			15
LADLES.			Button's Imitation, per doz. 5 00 9 00			Window, patent, per doz. 2 20 4 50			" " in bulk			15
Melting, per doz. 1 70 4 50			German, per doz. 0 60 2 60			Door, per doz. 7 10			Tinned capped trunk nails			15
LEMON SQUEEZERS.			PLUMBS AND LEVELS.			SCREW DRIVERS.			Double pointed tacks. discount 90 and			25 p.c.
Porcelain lined, per doz. 2 20 5 60			S.R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.			Sargent's per doz. 0 65 4 00			TAPE LINES.			
Galvanized, " " " " 1 87 3 85			POPPERS.			SCREWS.			English, ass skin, per doz. 2 75 5 00			
King, wood, " " " " 2 75 2 90			Corn, square, per doz. 1 35 2 00			Wood, F. H., iron, and steel, dis. 87½ &			English, Patent Leather 5 50 9 75			
" glass, " " " " 4 00 4 50			PRUNING SHEARS.			10 p.c.			Chesterman's, each			2 85
A glass, " " " " 1 20 1 30			Per doz. 4 00 5 50			Wood, R. H., " dis. 80 and 10 p.c.			steel, each			8 00
LINES.			PULLEYS.			" F. H., brass, dis. 82½ and 10 p.c.			THERMOMETERS.			
Fish, per gross			Hothouse, per doz. 0 55 1 00			" R. H., " dis. 75 and 10 p.c.			Tin case and dairy, dis. 75 to 75 and 10 p.c.			
Chalk, " " " " 1 90 7 40			Screw			Drive Screws, 87½ and 10 per cent.			Asbestos, filled, per doz., 35 to 40 p.c.			
LOCKS.			Awning			Bench, wood, per doz. 3 25 4 00			TIES.			
Canadian, dis. 50 p.c.			PUMPS.			iron, " " " " 4 25 5 75			Cow, per doz. 1 25 2 00			
Russell & Erwin, per doz. 1 75 7 50			Rumsey or Canadian cistern, 60 p.c.			SCYTHES.			P. S. & W., 10 p.c.			
Cabinet, " " " " " " " "			Pitcher spout, 70 to 70 and 5 p.c.			Discount, 60 and 10 p.c. revised list.			Canadian, 35 to 37½ per cent.			
Eagle, dis. 30 p.c.			Canadian cistern, 60 p.c.			Canadain pitcher spout, \$1.25 to \$3.			SCYTHE SNATHS.			
Padlock, " " " " " " " "			PUNCHES.			Canadain pitcher spout, \$1.25 to \$3.			Canadian, dis. 45 to 50 p.c.			
English and Am., per doz. 0 50 6 00			Saddlers', per doz. 1 00 1 85			PUTTY.			SHEARS			
Scandinavian, " " " " 1 00 2 40			Conductors, " " " " 9 00 15 00			Bladder, per lb. 1 75 01½			B. & W., japanned, dis. 75 p.c.			
Eagle, dis. 15 to 17½ p.c.			Tinners' solid, per set. 0 00 0 72			Tins, lbs. 2 50 2 75			B. & W., N.P., dis. 65 p.c.			
MACHINE SCREWS.			" hollow, per inch. 0 00 1 00			RAIL.			Seymour's, dis. 60 p.c.			
Iron and Brass.			RAZORS.			Barn door, per foot. 0 02½ 0 02½			Etina, dis. 75 to 75 and 10 p.c.			
Flat head, discount 25 p.c.			Geo. Butler & Co.'s, per doz. 8 00 18 00			Sliding door, " " " " 0 03½ 0 03½			Heinisch, dis. 60 p.c.			
Round Head, discount 20 p.c.			Boker's, " " " " 7 50 11 00			Lanes, " " " " 0 02½ 0 02½			Bristol, japanned, 80 p.c.			
MAGNOLIA METAL, ETC.			Wade & Butcher's, " " " " 3 60 10 00			RAKES.			" N.P., dis. 70 p.c.			
Magnolia Anti-Friction Metal, per lb. 25			Arbenz's, " " " " 9 00 18 00			Cast steel and malleable Canadian, list dis			Clausen, full nickel, 60 p.c.			
No Name Metal, " " " " 18			Theile & Quack's, " " " " 7 00 12 00			60 to 60 and 10 p.c. revised list.			" japanned handles, 67½ p.c. off.			
Mystic Metal, " " " " 18			Currier's, per doz. 1 25 3 60			Wood, 25 per cent.			Seymour or Heinisch tailor shears, 15 p.c.			
F. O. B. New York or Chicago.			RIVETS AND BURRS.			RAZOR STROPS.			SHEAVES.			
MALETS.			4 mos. or 3 per cent. cash 30 days			SHOVELS AND SPADES.			Sliding door, per set. 0 77 1 40			
Tinsmiths', per doz. 1 25 1 50			Carriage, Section, Wagon Box Rivets, etc.,			Canadian, dis. 45 and 2½ p.c.			SIEVES.			
Carpenters', hickory, per doz. 1 25 3 75			(Steel), 65 p.c.			Wood rim, black, per doz. 1 05 1 10			Wood rim, black, per doz. 1 05 1 10			
Lignum Vitae, per doz. 3 85 5 00			Black M. Rivets (Steel), 65 p.c.			" tinned, " " " " 1 25 1 35			" " " " 2 30 2 45			
Caulking, each			Black M. Rivets (Norway Iron) 60 p.c.			" black, " " " " 1 8 2 25			SNAPS.			
MATTOCKS.			Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.			SOLDERING IRONS.			Harness, German, dis. 35 to 37½ p.c.			
Canadian, per doz. 8 50 10 00			" " " " " " " " " " " "			Per lb. 0 23 0 25			Acme			
American, 60 and 10 p.c. off list.			cartoons, 1c. per lb. extra, net.			WROUGHT SPIKES.			Lock, Andrews			
MEAT CUTTERS.			Burrs, iron or steel, 55 and 5 per cent.			Discount, 30 to 35 per cent.			Try and bevel, dis. 50 to 52½ p.c.			
Enterprise, American, dis. 30 to 32½ p.c.			Terms, 4 mos. or 3 per cent. cash 30 days.			SPOKE SHAVES.			STAPLES.			
German, 15 per cent.			RIVET SETS.			Wood, English			Fence, galvanized			
MINCING KNIVES.			Canadian dis. 35 to 37½ per cent.			ron, American			Wrought iron, dis. 80 to 82½ p.c.			
American, per doz. 0 42 2 35			ROPE.			SPOONS AND FORKS.			STOCKS AND DIES.			
MOLASSES GATES.			Sisal. Manilla			Tea spoons, per gross			American, dis. 25 p.c.			
Stebbin's Patent, dis. per cent., 77½ per cent			7-16 in. and larger, per lb. 6½ 00 7½			Dessert, " " " " 21 00 00 00			STONE.			
NAILS.			¾ in. 6¾ 00 7½			Table, " " " " 30 00 30 00			Washita, per lb. 0 28 0 60			
Cut Nails (Iron). Basis—50 to 60 dy. \$1.85			¾ and 5-16 in. 7½ 00 8½			Dessert Forks, " " " " 24 00 00 00			Hindustan, " " " " 0 06 0 07			
f.o.b., Toronto, Montreal, Hamilton.			Cotton			Medium " " " " 27 00 00 00			slips, per lb. 0 09 0 09			
London.			Russia Deep Sea			Table " " " " 36 00 00 00			Labrador, " " " " 0 00 0 13			
Cut Nails (Steel). Add 10c. to the prices in			Jute			SQUARES.			" Axe, " " " " 0 00 0 15			
list for iron nails.			Boxwood, dis. 80 and 10 p.c.			Iron, per doz. 1 65 2 90			Turkey			
Wire Nails, basis, \$2 per keg Toronto. For			Ivory, dis. 37½ to 40 p.c.			Steel, dis. 70 per cent., revised list.			Arkansas			
places outside factory points, \$1.91 f.o.b.			SAD IRONS.			Try and bevel, dis. 50 to 52½ p.c.			Water-of-Ayr			
Montreal. Carload lots, 5c. per keg less			Mrs. Potts, per set. 0 62½ 1 00			STAPLES.			Scythe, per gross			
than above figures.			N.P., per set. 90			Fence, galvanized			Grind, per ton			
Brads and finishing nails, special sizes, 80			SAD HEATERS.			Wrought iron, dis. 80 to 82½ p.c.			15 00 18 00			
p.c. from new list.			Dome, Shepard's, per doz. 4 75 5 00			STOCKS AND DIES.			WIRE.			
NAIL PULLERS.			SAND AND EMERY PAPER.			American, dis. 25 p.c.			Brass Wire, 16 to 25 wire gauge, 12½ p.c.			
German and American			Dominion Flint Paper, 50 per cent.			STONE.			Copper Wire, 12½ p.c. rev. list discount.			
NAIL SETS.			B. & A. sand, 40 and 2½ per cent.			Washita, per lb. 0 28 0 60			Annealed, annealed and oiled, galvanized			
Square, round, and octagon,			Emery, per quire. 0 60 0 90			Hindustan, " " " " 0 06 0 07			small lots, 30 per cent. discount off			
per gross			SASH CORD.			slips, per lb. 0 09 0 09			vial list.			
Diamond			Per lb. 0 22 50			Labrador, " " " " 0 00 0 13			[In lots of 1,000 lbs., 35 per cent. discount			
NETTING.			SASH LOCKS.			" Axe, " " " " 0 00 0 15			annealed oiled, and annealed and gal			
Poultry, 67½ to 70 per cent.			Triumph and Morris, dis. 37½, 40 per cent.			Turkey			vanized, freight will be prepaid when			
OIL.			Kempell's, dis. 40, 62½ per cent.			Arkansas			exceeding minimum rate of 20c. per			
Canada refined oil (Toronto).. 0 16 0 16½			Canadian, dis. 45, 50 per cent.			Water-of-Ayr			lbs.]			
Carbon safety " " 0 18 0 00			SASH WEIGHTS.			Scythe, per gross			Bright, coppered steel and spring, 30 to 30 n			
Canada w. w. " " 0 18 0 00			Sectional, per 100 lbs. 1 40 1 50			15 00 18 00			5 p.c. revised list, f.o.b. Montreal, To			
American w. w. " " 0 00 0 21			Solid, " " " " 1 10			TACKS, BRADS, ETC.			ronto or Hamilton.			
Pratt's Astral, " " " " 0 00 0 22			SAWS.			Cheese-box tacks, blue, 80 p.c.			Broom Wire, per lb. 0 05% 0 06			
OILERS.			Crosscut, McMillan & Haynes,			Trunk tacks, black, 80 p.c.			Clothes Line Wire, 19 gauge,			
McClary's galvan. iron oil can,			per dozen. 0 40 0 70			B.B.B. iron carpet, blued			per 1,000 feet			2 75 3 00
with pump, per doz. 0 00 19 50			"Empire," McMillan & Haynes,			B.B.B. iron carpet, bright or blued (in			WIRE FENCING.			
Zinc and tin, dis. 50, 50 and 10.			per ft. 0 00 0 70			kegs)			Galvanized, 2 barb, 2½ and 5			
Copper, per doz. 1 25 3 50			Hand, Disston's, dis. 12½ to 15 p.c.			B.B.B. iron carpet, tinned (in kegs)...			inches apart. 2 30			
Brass, " " " " 1 50 3 50			S. & D., 40 to 40 and 10 per cent.			B.B.B. iron carpet, tinned (in kegs)...			Galvanized, 4 barb, 4 and 6			
Malleable, dis. 25 per cent.			Crosscut, Disston's, per ft. 0 35 0 55			B.B.B. cut tacks (in bulk), 75 and 10			inches apart			2 30
PAISLS.			S. & D., dis. 35 p.c. on Nos. 2 and 3.			B.B.B. cut tacks (in bulk), 75 and 10			Galvanized, plain twist, all			
Galvanized, per doz. 2 25 3 30			Hack, complete, each. 0 75 2 75			" ¼ weights			delv'd. 2 30			
PENCILS.			frame only. 0 00 0 75			Swedes, cut tacks, genuine, blued and			Plain twist			2 30
Dixon's, per gross			SAW SETS.			tinned, 75 and 10			Terms, 60 days, or 2 per cent. in 30 days			
" Carpenter			" Lincoln," McMillan &			Swedes, upholsterers			WIRE CLOTH.			
PICKS.			Haynes, per doz. 0 90 7 50			tinned, 75 and 10			Ordinary, discount 25 per cent.			
Per doz. 6 00 9 00			Whiting			" Inco			Painted Screen, per 100 sq. ft. 1 35			
PICTURE NAILS.			0 87 7 00			" brush			WRENCHES.			
Porcelain head, per gross. 1 40 3 00			SAW SETS.			gimp, blued, tinned & japan'd			Acme, 35 to 37½ per cent.			
Brass head, " " " " 0 40 1 00			Crosscut, McMillan & Haynes,			Zinc tacks			Agricultural, 70 and 10 per cent.			
PIPE CUTTING MACHINERY.			per dozen. 0 40 0 70			Copper tacks			Standard, dis. 60, 60 and 10 per cent			
Forbes Patent Die Stocks—Curtis & Curtis			"Empire," McMillan & Haynes,			TACKS, BRADS, ETC.			Coe's Genuine, dis. 30 to 32½ p.c.			
Mfrs., Bridgeport, Conn.			per ft. 0 00 0 70			Cheese-box tacks, blue, 80 p.c.			Diamond, dis. 33½ to 35 per cent.			
No. 30 Hand Machine, range ¼ to			Hand, Disston's, dis. 12½ to 15 p.c.			Trunk tacks, black, 80 p.c.			" S., per doz. 5 80 7 00			
2 in. R. & L. \$ 50 00			S. & D., 40 to 40 and 10 per cent.			B.B.B. iron carpet, blued			G. & K.'s, per doz. 6 00			
No. 38 Hand Machine, range 1½			Crosscut, Disston's, per ft. 0 35 0 55			B.B.B. iron carpet, tinned (in kegs)...			Burrell's Pipe, each			3 40
to 4			S. & D., dis. 35 p.c. on Nos. 2 and 3.			B.B.B. cut tacks (in bulk), 75 and 10			Pocket, per doz.			
No. 56 Hand Machine, range 2½			Hack, complete, each. 0 75 2 75			" ¼ weights						
to 6			frame only. 0 00 0 75			Swedes, cut tacks, genuine, blued and						
PLANES.			SAW SETS.			tinned, 75 and 10						
Wood, bench, Canadian dis. 55 per cent.,			" Lincoln," McMillan &			Swedes, upholsterers						
American, dis. 55.			Haynes, per doz. 0 90 7 50			tinned, 75 and 10						
Wood, fancy Canadian or American, 37½			Whiting			" Inco						
to 40 per cent.			0 87 7 00			" brush						

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Improved Steam Condensing Exhaust Pipe Heads . . .

For attaching to Outlet of Pipe above roof. . . .

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BRAND "C.I.F." THREE RIVERS

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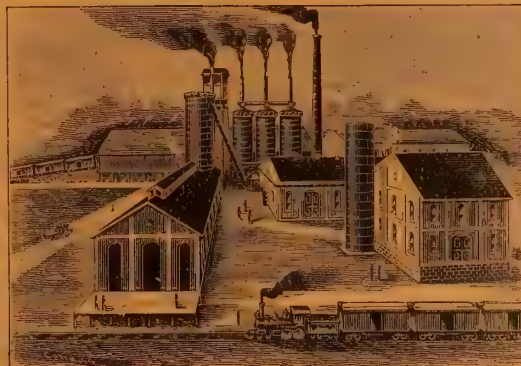
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HIGH GRADE PIG IRON.



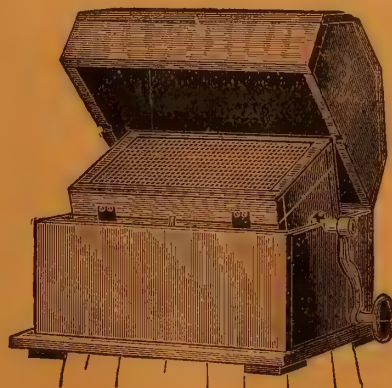
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THE CHAMPION ...Cinder Sifter

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Write for Price.



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"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, DECEMBER 4, 1897

No. 49



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

Beware of Fraudulent Imitations.

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They perform the work in a degree not less than perfect.
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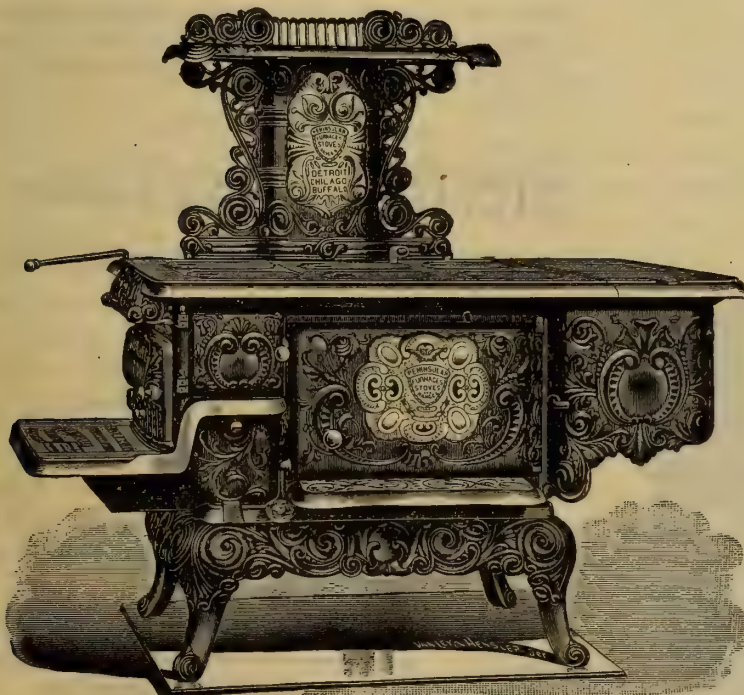
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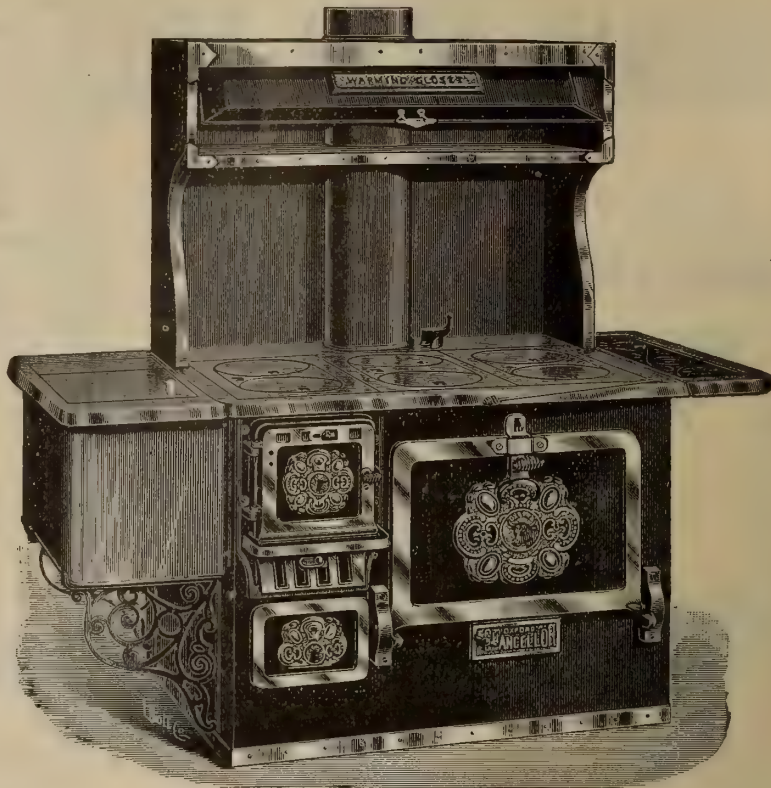
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Oxford . . . Chancellor

is a heavy steel plate range that burns the coarsest wood—it is cheaper and better than a coal iron range and will last a lifetime.

The oven is perfectly ventilated and extra large, 24 x 22 x 15, with a balanced drop door. 6 9-in. holes on top, with or without the reservoir.

We know that this stove will sell on sight; the price is moderate—if you haven't them in stock send at once for catalogue and price list.



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Empire Jewel Range (6 Hole.)

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WE HAVE ALSO THE

Sterling Jewel (6 Hole)

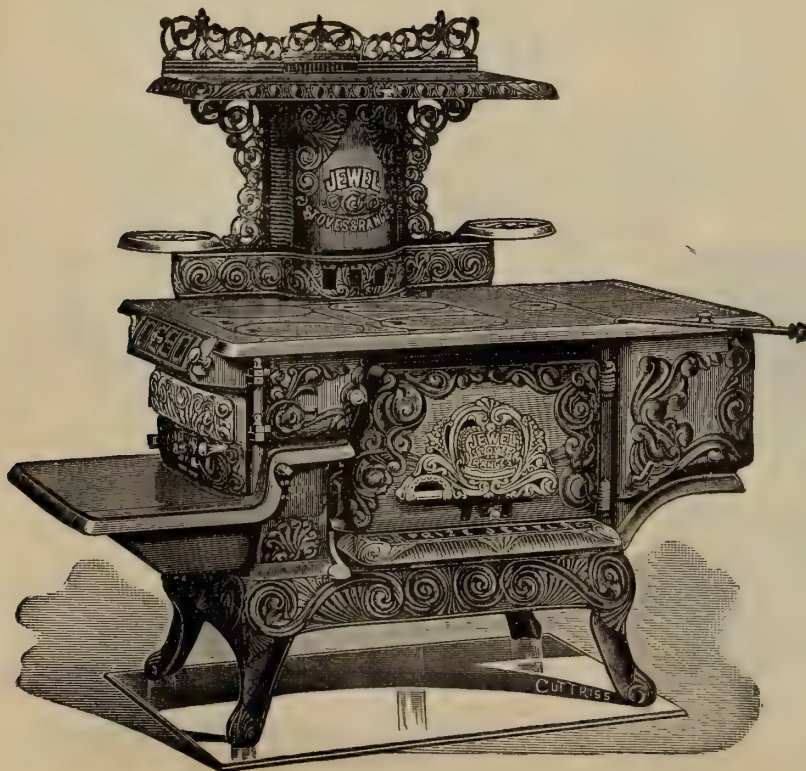
which is smaller than the Empire, but of similar construction, and a splendid worker.

THE . . .

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is specially adapted for burning wood. It has extra large Oven and Fire Box.

Our line of **STEEL RANGES** in many varieties is worth examination.



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Manufacturers

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HARDWARE AND METAL

Vol. IX.

MONTREAL AND TORONTO, DECEMBER 4, 1897

No. 49

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WHEN WRITING ADVERTISERS
PLEASE MENTION THAT YOU SAW
THEIR ADVERTISEMENT IN THIS PAPER

ANOTHER BUSINESS MAN IN PARLIAMENT.

HARDWARE AND METAL has during the past three or four years persistently advocated the election of business men to Parliament irrespective of whatever their politics may be. Our readers who can recall the list of men we have supported will readily recognize this.

It is therefore with some satisfaction we note the return of Mr. George H. Bertram for Centre Toronto.

Mr. Bertram is a business man, not in theory, but in practice. From his boyhood up he has been actively connected with the hardware trade, beginning his career in Scotland, while during the last few years he has acquired an extensive reputation as a manufacturer of machinery, steamships, etc. He is, therefore, just the material this country badly needs in its houses of legislation, both Dominion and Provincial.

The candidate whom Mr. Bertram defeated is a gentleman whose many virtues and scholarly attainments have more than a local reputation; but he is not a business man. He is a professional man, and we have already too many of such in Parliament. Centre Toronto is essentially a business constituency, and it is only proper that it should be represented in the Dominion Parliament by a business man.

When Mr. A. E. Kemp, president of the Kemp Manufacturing Co., Limited, refused to allow his name to go before the electors, HARDWARE AND METAL sincerely regretted his decision, for, with two practical business men in the field, the constituency would have been assured of the return of a business man, but with only one of this character in the campaign, there was, of course a possibility of the choice of the electorate falling upon a man other than of the class we have desired to see members of the Canadian House of Commons.

Fortunately, however, we have now another business man in Parliament, and one, too, who replaces a professional man.

TO SEEK ANOTHER KLONDIKE.

A syndicate of practical business men and mining experts has been formed in Halifax to explore Labrador for mineral wealth. A schooner is being fitted out to carry the mining prospectors early next June to Sandwich Bay, St. Louis River and Hamilton Inlet, Labrador, where they will spend the summer prospecting. Samples will be taken to Halifax, and the following summer the land from which samples found to be good were taken will be fully developed.

BARB WIRE IN CANADA.

ALTHOUGH after January 1 barb wire will come into Canada duty free, the manufacturers of this article will not retire from the field, at least until they are driven out.

Their intention, it is learned, is to cater for the demand in their respective localities which requires prompt shipment. They can scarcely be expected to do anything else.

Already jobbers are quoting United States barb wire for delivery after January 1 at \$1.75 in carload lots. It is obvious the Canadian makers cannot compete with this to any extent. Their wire alone will cost them about \$1.73 to lay down, to say nothing of the cost of manufacturing.

One thing is certain, the makers of barb wire in the United States are determined to come up and possess the Canadian market if they can, and with that end in view some of them will keep stock here. We hear of one concern which has decided to keep 500 to 1,000 tons on hand in Toronto in order to be ready to ship promptly.

The outlook is certainly not bright for the makers in Canada, and they are to be commended for their courage in deciding to stay in the field.

EVIL OF SELFISHNESS.

A clerk who can never get above his own interest will never have a high value set upon himself by those in whose employ he may from time to time find himself. Selfishness never built up anything but a bad reputation.

CANADIAN PRODUCTS IN BRITAIN.

CANADA'S best foreign customer is Great Britain. This will be denied by no one. Our exports to that country in 1896 were valued at \$66,690,288, against \$44,448,410 to the United States, our next best foreign customer.

Taking it in another way, Great Britain takes about 60 per cent. of the goods exported from the Dominion. This is certainly a matter for congratulation. But a great deal of the satisfaction which induces this congratulation gives place to dissatisfaction in most instances when we begin to compare the value of the various articles we send to the Motherland with that of the same lines of goods the latter imports. The following table gives the value of some of the imports into Great Britain in 1896 and the amount contributed by Canada according to our own trade returns :

Article.	Imports into G.B from all countries.	Exports from Canada to G.B.
Cattle.....	\$45,284,601	\$6,816,361
Sheep.....	5,517,019	1,722,091
Bacon.....	38,225,306	3,799,428
Hams.....	15,262,300	570,921
Butter.....	74,674,537	958,649
Cheese.....	23,848,749	14,251,790
Eggs.....	20,364,892	704,768
Fruits.....	15,433,726	1,304,261
Barley.....	27,756,147	15,483
Beans.....	4,075,429	9,046
Peas.....	4,148,663	881,589
Oats.....	20,564,470	112,704
Wheat.....	105,503,026	7,891,874
Flour.....	44,851,433	347,685
Fish.....	15,635,198	3,710,378
Beef (fresh).....	24,473,629	3,402

In compiling the above table we have only included such articles as Canada is qualified to supply. Of cheese, it will be noticed that Canada contributes about 60 per cent. of Britain's total importation of this article, and while we may hope for an enlargement of this proportion yet we have no reason to be chagrined if such is not accomplished. But when it comes to the making of comparisons in every other article it is evident there is a great deal that should stir us up to greater activity. Even in cattle Canada's contribution is only about 13 per cent. of the whole. Of wheat we supply less than 7 per cent. A proportion of 20 per cent. is not bad for fish, but this should be capable of enlargement. The quantity of flour we supply is enough to make us hide our head. Our proportion is only about three-fourths of one per cent. In eggs, butter, barley, oats and beef we are nowhere. In bacon our exports to Great Britain have increased enormously

during the last few years, and it is to-day the favorite article on that market. During the five years ending 1896 the increase in the exports of bacon and hams to the Motherland was over 300 per cent. But even here it is evident there is room for improvement when it is remembered that in spite of the great increase our proportion is only 7 per cent. of the whole.

The reason Canada does not contribute a greater share of its products to Great Britain is obviously not because there is not the market there. Neither is it that we are not qualified to supply a larger proportion. It is simply because we have not taken advantage of our opportunities.

No matter how excellent may be the quality of goods which manufacturers turn out or merchants have upon their shelves they must be brought before the public if they are to be sold. In other words, they must be advertised, and, all other things being equal, the measure of success with which they meet will be in proportion to the judicious advertising which is employed. And what applies to individual business men applies with equal force to a nation assaying to do an export trade.

Canada has not been sufficiently advertised in Great Britain, or in any other country for that matter. In Sir Charles Tupper and Lord Strathcona Canada has had good High Commissioners, but their functions have been more of a diplomatic than of a business nature.

What Canada wants is one or more practical business men in Great Britain to represent her in a purely business capacity with what may be termed a sample room of products of the Dominion at their respective headquarters. It has paid some of the colonies in Australasia to do this and what has paid them will certainly pay Canada if business commonsense is exercised in their management.

Canada is the "white haired boy" in Great Britain at the moment and it is to be hoped the Government will act with business-like promptitude in supplying what is so obviously a necessity.

Hon. Joseph Chamberlain was once engaged in the wood screw making business. He is now engaged in screwing the component parts of the Empire closer together.

MAY GO TO KINGSTON.

THE removal of the big iron works of Abbott & Co. from Montreal to Kingston now depends on whether the Council of that city will accept the arrangement arrived at in a conference held at Kingston last Saturday.

William and Arthur Abbott, of the Metropolitan Rolling Mills of Montreal, and their superintendent, Mr. Peacock, had a conference with the Finance Committee and a committee from the Board of Trade in respect to the removal of the works from Montreal to Kingston.

A satisfactory arrangement was reached, and the City Council will be asked at its next regular meeting to ratify a bylaw to be submitted to the electors to grant Abbott & Co. a bonus of \$50,000 and a free site and exemption from taxes. For this Abbott & Co. will have to erect buildings and put in a plant, all to be worth \$200,000. The first year the company will have to employ 150 men, and each following year not less than 200 men. The Council will be satisfied in respect to the financial standing of the concern. The bonus will not be paid until the plant is in working order.

CONVICT-MADE PIG IRON.

It will be remembered that a few weeks ago reference was made in **HARDWARE AND METAL** to the action of the Customs Department in stopping the entry into Canada of pig iron made by convict labor.

Since then the Department has sent a commissioner to the iron districts in the Southern States to investigate the matter, and it is understood that his report has been handed to the Customs authorities and by them submitted to the Minister of Justice for his ruling on points of law.

The decision of the Department of Justice as well as the report of the commissioner, will be awaited with a great deal of interest.

TRANSIENT TRADERS' LICENSES.

The people of Sarnia seem determined that transient traders shall pay for the privilege of doing business in their town, as the Sarnia Council, at a recent meeting, fixed the license for such tradesmen at \$250, whether for a year or any portion thereof.

TORONTO'S ELECTRIC LIGHT QUESTION.

CITY ENGINEER KEATING, of Toronto, has sent in his report to the City Council on the cost of installing and operating a plant of sufficient capacity to provide electric light for all municipal buildings, public parks and streets, and on the cost of installing and operating a plant for the supply of electric energy to manufacturers and others as an inducement to locate or remain in the city of Toronto.

In regard to the electric plant for municipal purposes, Mr. Keating stated that the estimated cost of such a plant per annum would be \$105,165, an average of \$74.75 per light, whereas the city now pays \$74.86 per light. It is considered, however, that the light service would be better than the one now furnished.

The cost of installing an electric plant for commercial purposes would be about \$580,000, and the annual expense of running \$57,000 for a plant to furnish 60,000 incandescent lights and 1,000 horse-power, and as the present companies have rates about at the minimum, Mr. Keating disapproved of the idea of the city installing such a

plant. He had consulted with several expert electricians and engineers, including Mr. Alex. Dow, of Detroit, and they had borne out his views.

WIRE CONSOLIDATION.

FOR some time negotiations have been pending between the wire and wire rod manufacturers in the United States with a view to consolidating the various factories in the country, and if the press despatches are to be relied upon the scheme is about consummated.

It is said the capital will be furnished by British, American and German concerns and will aggregate about \$60,000,000. It is understood that each mill will be purchased outright by a company formed recently at an appraised valuation, to be paid for two-thirds in cash and the other third in equal portions of preferred and common stock.

The consolidated concern will not, we are told, confine itself merely to the manufacture of wire rods and wire, but some of the steel plants in the United States are also to be acquired, and that the steel output will be about 100,000 tons per month.

The affair has naturally created more or

less interest in Canada and has had a tendency to strengthen prices. But from what can be gathered, some, at least, of the factories in Canada have fairly good stocks of wire rods on hand, the owners not having been altogether in ignorance of what was going on across the border.

As an index, however, of the feeling in this country it may be noted that on Thursday afternoon the barb wire manufacturers in Canada issued a notice withdrawing quotations from the market.

THE SKATES HAVE ARRIVED.

Hardware jobbers are hailing with some pleasure the arrival of the steamship City of Boston. The cause of this pleasure is that she has on board upwards of 60,000 pairs of German skates for the trade in Canada.

These skates should have arrived the early part of September last, but they are only now putting in an appearance, the manufacturers having been unable to fill orders. As a result back-ordering has been common with the jobbers.

The bulk of the skate trade is, however, done during the Christmas holiday season, and so retailers will be able to get their supplies in time for that season's business.

1898

Iver Johnson Automatic Revolvers

have many points of superiority; chief amongst these is the fact that they

cannot be discharged accidentally.

The only way to discharge one is to **pull the trigger.** Catching the hammer in the clothing, dropping the weapon, or any other such accident does no harm, as the revolver cannot be fired unless the trigger is pulled.

Iver Johnson Cycles

are well and favorably known as staunch and reliable wheels, made of good material, by a house with a reputation for knowing how to make good cycles. Their machines

ARE

known throughout the country as

Honest Cycles at Honest Prices.

SEND FOR CATALOGUES.
WE WANT GOOD AGENTS.

Iver Johnson's Arms and Cycle Works

New York Branch,
99 Chambers Street

. . . . Fitchburg, Mass.

THE MAKING OF A DOLLAR BILL.

BY ALEXANDER COLIN CAMPBELL.

ALTHOUGH those persons who feel that they have enough money for all their requirements are probably the rarest specimens of the human family, the receiving and spending of money is an experience common to more people than any other we enjoy as members of civilized communities. In Canada we have never troubled ourselves to make gold coins. Our silver and copper pieces are quite sufficient for the small transactions of daily life, and, in place of the gold of former times and other countries, we use the more convenient system of a paper currency. To the banks is remitted the privilege of issuing the \$5, \$10 and \$20 bills which commonly liquidate debts between traders, while the Dominion Government monopolizes the issue of the \$1, \$2 and \$4 bills, the humbler but more constant acquaintances of the common people, and the principal means of maintaining a good understanding between traders and their customers. There is a series of bills of high denomination—\$50, \$100, \$500 and \$1,000—which also are issued by the Dominion Government. These evidences of wealth are not without interest, but as they rarely come within the ken of the ordinary man or woman, but are used mainly in banking transactions, it is not necessary to say more about them.

Though the handling of the bills of the smaller denominations is a daily experience with everybody, few know how these pieces of paper money originate, or how they get into the hands of the people, or what becomes of them after their work is done. Let not the gentle reader turn from this brief article in dread of brain-wrenching complications concerning standards, media, and parities of values. The Dollar Bill is a Thing, and an interesting one, and to that we will confine ourselves.

To those who have visited Ottawa, the Eastern Block is a familiar memory. On the ground floor of this massive and beautiful building are the offices of the Finance Department. At the end of one of the lobbies, away from the track of the casual visitor, is a small suite of offices, the headquarters of the Currency Branch, the native home and final resort of the familiar \$1, \$2 and \$4 bills. The head of the branch is Lt.-Col. Fred. Toller, whose official title is Controller of Dominion Currency. The total circulation of Dominion notes has been as high as \$22,893,259, but it usually runs from eighteen to twenty millions of dollars, increasing in the fall when the moving of the crops causes the heavier business. Besides the care of this great circulation Lt.-Col. Toller is charged with the custody of millions of dollars of securities deposited

with the Government by the insurance companies. Not only must these be kept so as to be accounted for at any moment, but, as they bear interest, the coupons must be clipped as they mature and sent to their owners. Dealing with slips of paper which are practically money, this is a business demanding absolute accuracy. It will be seen then that there is hard work for the small staff engaged.

But over and beyond this, there rests upon the head of the Branch a weight of responsibility which only the least nervous of mortals could endure. Lt.-Col. Toller has in marked degree that first necessary qualification for a specially trying position—he loves and takes pride in his work. An Englishman by birth, he had some experience in banking in his native country, which he extended by some years of work in banks in Canada. He has been twenty-five years in the service of the Dominion Government, and has been head of the Currency Branch ever since it was established fifteen years ago. The currency system of Canada is probably as perfect as that of any other country in the world. But such systems are not wholly automatic, and the better the laws the more honorable, intelligent and painstaking must be the officers who enforce them. Though the slightest hitch in the currency system would cause an instant and angry outcry on the part of the people, the fact is that, like the healthy man who is said not to know he has a stomach, the people of Canada hardly know they have a currency system. Year after year the appropriations for carrying out the work and paying the salaries of the Branch are passed in Parliament, and even the most inquisitive or querulous of the people's representatives rarely even ask for a formal explanation. This silence is the most eloquent praise that one in Lt.-Col. Toller's position could receive. The immunity from error and confusion is due, in the first place, to a thorough knowledge on the part of the head of the Branch of the duties of his position, and, in the second place, to the rigid adherence to rules that experience has proven to be wise. The Currency Branch works hard, but it distinctly declines to get "rattled."

There are agencies in Charlottetown, Halifax, St. John, Montreal, Toronto, Winnipeg and Victoria—one in each province. These are presided over by officers known as Assistant Receivers General, all of whom, except the one at Montreal, have duties also in connection with Government Savings Banks. These agencies deal with the ordinary banks in furnishing Dominion bills and receiving the worn-out bills which are unfit for further circulation. The Currency Branch at Ottawa performs similar

functions in connection with the banks in that city. Thus there is one general source of supply, and there are eight reservoirs, so to say, which supply the banks which, in turn, supply the public. As more bills are required for the business of the country they are easily and quickly supplied, and as the changes of season or other circumstances lessen the demands, the currency system "hauls in the slack," as the steamboat men say, and thus not a dollar is forced out or kept back undesirably.

The printing of the bills is done under contract. This interesting process should be the subject of a separate article. To deal with it now would occupy too much space and would interrupt the consideration of the duties of the Currency Branch. Let us suppose that the printing is done and that the messenger has brought the bills to the Branch. They are in bundles of sheets, a thousand sheets to a bundle, and four bills in a sheet. First the sheets are counted and carefully examined. The officer receiving them must note carefully three things. First, he must see that the bills are accurately numbered. Any undetected mistake in this respect would lead to confusion, and dealing with merchandise which is soon to be turned into money at its face value, anything like the shadow of the possibility of a mistake must be avoided. Next, he must see that the sheets are all the same size; otherwise when the bundles go to the cutting machine some of the bills would be spoiled. In the third place, he must see that the printing is right, for upon uniformity and perfection in printing depends to a great extent the protection of the public against counterfeiters, and besides, the Dominion pays for first-class work and insists upon getting it. Very seldom, indeed, is anything found to be wrong, and the bundles of sheets are signed for by the officer receiving them.

The bills, as they come from the printer, bear one signature in fac-simile, that of Mr. J. M. Courtney, Deputy Minister of Finance. Another signature must be written in at the lower left-hand corner under the word "Countersigned." This work of signing the bills is relegated to a staff of nine ladies, who occupy a room by themselves. These clerks all sit at one large desk the surface of which is divided into compartments by glass partitions. Thus, while each clerk is in full view of the others, there is no danger of the precious documents they handle getting intermingled. The signer receives the bills in bundles of a thousand sheets, no second bundle being given until the previous one has been returned with signatures complete. Each delivery either way is signed for in a book kept for the purpose, the receipt for the

signed bills being given by two officers. It is impossible for the most expert of the ladies to sign four thousand sheets in one regular working day, from 10 a.m. to 4 p.m., with an intermission for lunch, but by working overtime it has been done. The average time required for signing four thousand bills is from two and a half to three days. This is really rapid work. Let anybody who doubts it sit down and sign his name clearly and neatly four thousand times on a thousand separate sheets of paper. The ladies who sign the bills are not permanent but temporary clerks, and are paid only for the days of actual work. There are no employees of the Dominion Government who earn their money harder. The bundles that are not signed or not delivered back to the teller are put in a tin box which is made to just hold one bundle, each signer having a separate box the key of which she keeps. These boxes are placed in the vault with the other valuables.

With so many millions of dollars' worth of paper to be cared for, it can readily be understood that a secure receptacle is one of the features of the Currency Branch. There is not in Canada a more perfect safe than that whose ponderous doors open from Lt.-Col. Toller's private office. The body is of seven thicknesses of chrome steel and iron, there are double doors to open which the working of two combinations is necessary and each combination is in possession of a separate officer, and the time lock affords a further protection. Massive as a railway bridge, yet fine as a watch, such a safe is a thoroughly characteristic specimen of modern art.

The signed bills are sent to the Assistant Receivers General or handed to the representatives of the local banks as required. They are given out in sheets, again restored to the familiar thousand sheet package. Those sent out are sent by express in boxes specially designed for the purpose. Each delivery to the Express Company is attested by the signatures of two officers, who stand ready to declare that on the date and at the hour given the bills whose number appear in the book were duly delivered.

While the stream of new bills sets outward there is an almost equally large stream of worn, greasy defaced bills inward. These latter are destroyed. This seems a simple thing to say, and yet the destruction of a battered old hulk of a bill is attended with just as much form and just as much circumspection as the issue of a new one. If any one requires it he can get clean or new bills to any amount he cares to pay for from the Assistant Receivers General. It is the duty of bank tellers to retain and return Dominion bills that are unfit for further circulation, but the public are really their own protectors

against disreputable looking paper currency. The Assistant Receivers General issue new notes in place of old ones, and it is through these officers that nearly all the worn bills are returned from the banks and from the public. Worn bills are cancelled in the offices of the Assistant Receivers General before they are sent to the Currency Branch, the cancellation being affected by cutting out two pieces from the lower side, like a hungry boy's two bites from a piece of bread and butter. These worn-out bills are placed in a special vault, practically as strong as the principal safe, there to await the day of their destruction.

When the work of signing bills has been carried somewhat in advance of the requirements of the country, the ladies in the big room are required to count the old bills and arrange them according to the office through which they were issued—Halifax, Montreal, Toronto, etc. On a day and at an hour appointed an officer of the Auditor General's Department attends and receives the old bills, and he and an officer of the Currency Branch together take the bills to a room in the basement in which is a furnace, a sort of annex to the general heating furnace of the building, and throw them into the fire. The furnace is then locked and the key

borne away to the Auditor General's office. Bound in bundles as they are and covered with the dirt of their travels, the bills do not burn rapidly, and that is why the officers do not wait for their complete destruction. A whole day hardly suffices sometimes to reduce the last package to ashes.

There is a tradition current in Ottawa that on one occasion a number of bills were drawn up the chimney by the fierce draft of the furnace and scattered over the grounds. To hear the story one would suppose that the lawn was covered with these ragged refugees, and that the populace of the Capital had a finer opportunity for acquiring wealth than the traditional occupants of Tom Tiddler's ground. The fact is, however, that only two or three bills escaped through a crack in the furnace plate caused by the heat. The mistake is not likely to occur again. Still, the method of destruction is not quite satisfactory, and Lt.-Col. Toller looks forward to the time when the system in use in Washington will be adopted—that of boiling the bills to a pulp in the presence of responsible officers.—Canadian Magazine.

It was estimated that from September 1 and up to November 17 the amount of wheat delivered by the farmers in Manitoba was 17,000,000 bushels.

Opportunity

To every man come many opportunities. The successful man is the one who has the ability to discern these opportunities, as they present themselves, and grasp them, and turn them to good account.

There is an opportunity offered to every paint dealer in Canada to increase his trade in paints, and add credit to his whole business by handling

THE SHERWIN-WILLIAMS PAINTS

If you are smart you can turn this opportunity, which includes the benefit of our complete business methods, to much lasting good and profit. If you let it pass you are losing a help towards success.

Think about it.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL
BOSTON



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

MACHINERY AND MECHANICAL DEPARTMENT.

THE AGE OF WATER POWER.

By R. D.

IT IS stated that during a recent interview in this country, Lord Kelvin asserted his belief that the time would come when the greater part, if not all, of the waters of Niagara would be utilized for industrial purposes; and that on being asked if he would not regret the loss of the grandeur and beauty of the Falls which would result, he stated that in view of the vast industrial benefit to be gained, he would not regret it.

Whether the distinguished scientist was correctly reported or not there are good grounds for believing that the future will see the new, or rather the newly developed, source of energy utilized for industrial power purposes to a degree that will make it only less universal than coal and the steam engine.

Time was when water was the leading source of energy for the power necessary to drive the machinery of mills and factories, but the cumbersome and unsatisfactory nature of the old under or over-shot water wheel and the necessity for locating the factories by rivers or water-falls was a great drawback to its usefulness. The introduction of steam with its advantages of being generated wherever was most convenient for the factory led to it being preferred to the water power in all cases where coal was plentiful.

The advent of electrical machinery opened a new and wider sphere of usefulness for water power, and unbound the chains which had tied it down to the banks of the river and streams. The water wheel gave place to the turbine, and electrical transmission has carried the silent energy to distant cities where it is used for lighting and other purposes, and who shall place a limit to the distance that it may cover? The recent developments of electrical science point to the possibilities of transmitting the stored energy of our rivers and water-falls to vast distances with very moderate loss due to re-

sistance, and with the improvements which analogy teaches us to expect in this comparatively new branch of engineering, we may look for its successful competition with steam in districts far removed from the source at which the power is generated. When this time shall come it is quite conceivable that Niagara will be depleted of its waters, if the authorities are so utilitarian as to allow it.

The statistics of the present state of the art show that it is advancing with rapid strides. America leads the world, with a total installation of over 70,000 horse-power. Switzerland comes next with 32,000 horse-power; France has 18,000, and the great power plant at Rheinfelden, Germany, will give that country fourth place, with about 17,000; Italy nearly as much; Norway and Sweden are each credited with 15,000. In Great Britain there is a total of about 4,000, making the total of the world about 200,000 horse-power. Supposing this power to be generated by steam, the consumption of coal would be about 12,000 tons a day, or, that is, by using this method of producing the 200,000 horse-power instead of by steam, there is a saving to the world of about 17 millions annually, which is not to be laughed at.

INDUSTRIAL NOTES.

Users of leather belting will, it seems, soon have to pay an advance of about 25 per cent. in price, a resolution to make such an advance having been adopted by the Leather Belting Manufacturers' Association, which held its annual meeting in New York City recently. The resolution making this advance cites the import duty placed upon hides by the Dingley bill as the cause of the action taken.

The Raddatz submarine boat at Oshkosh, Wis., was recently submerged for three hours to a depth of eleven feet. Two men were in the boat and the air supply proved to be quite satisfactory. The water was so

muddy that nothing could be seen from within. The boat was under the complete control of the occupants, and rose or sank promptly as desired. Nothing is said of its running. It is getting quite within the lines of possibility that vessels of this class may be of value as terrible agents in modern warfare.

Stories continue to come to us of the success and the extending use of the motor cycle in France. It is estimated that 3,000 are used daily in the streets of Paris for delivering and collecting goods and similar business uses, besides the many that are used for pleasure. The Comte de Doin recently sent two of his machines from Paris to Berlin, they making the trip of 745 miles without damage or accident in 124 hours, or at the rate of six miles an hour. The roads traversed through Belgium were described as being very bad.

MAKE THE PLUNGE.

Don't be afraid to climb the hill of life, remarks a contemporary. Nothing venture, nothing have, you know, and the man who is afraid to climb will never get into a bicycle saddle or reach the top rung in the ladder of success! Don't be chicken-hearted, and point out that "the reason why some men never fall is because they always stay at the bottom." What if you do have a fall or two, either off the wheel or in life! It won't hurt you, and will simply spur you on to higher deeds. Make the plunge. Faint heart never spelled success—either in life, love, or sport.

FENCE COMPANY ORGANIZING.

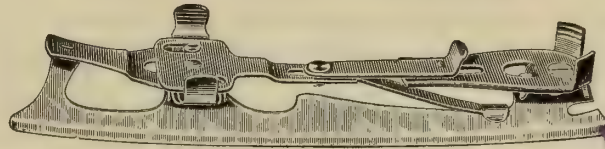
Notice has been given in The Canada Gazette that application for letters patent will be made for the incorporation of the "St Lawrence Anchor Fence Co., Limited," which company intend to manufacture, sell and erect all kinds of fences and gates, and to take out, buy or sell any patents relating to fences or gates. The capital stock of the company is \$20,000, divided into 200 shares of \$100 each, and the chief place of the business is to be Montreal.

H. S. HOWLAND, SONS & CO.

Wholesale Hardware
Merchants

Boker's Skates

...TORONTO

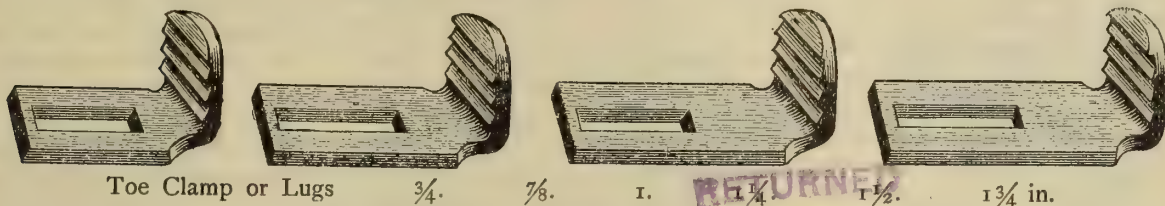


Ordinary Quality, Plain Finish	No. 5.....	8 to 12½ in.
Best Quality, Welded Steel Blades, Full Polished	7.....	8 to 12 in.
" " " " " " " " Nickel Plated	10.....	8 to 12 in.
" " " " " " " " Concaved, Nickel Plated	13.....	8½ to 12 in.

SIZES

EXTRA PARTS FOR ACME CLUB SKATES

TOE CLAMP OR LUGS



Toe Clamp or Lugs

¾.

⅞.

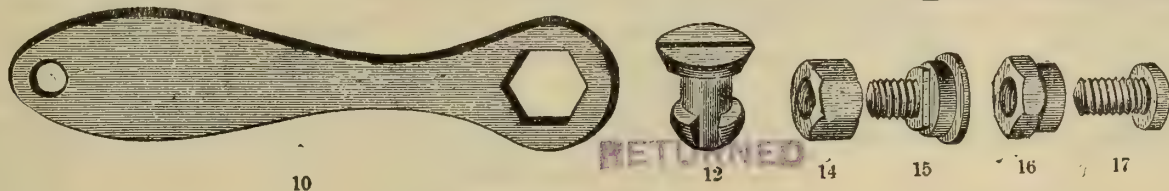
1.

1¼.

1½.

1¾ in.

Wrenches, Heel Buttons, Link Screws and Nuts, Lug Screws and Nuts



10

12

14

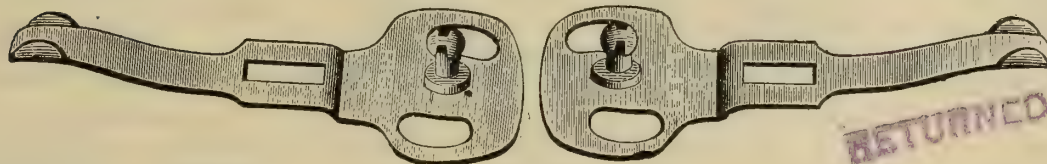
15

16

17

Full Size Cuts.

LEVERS



RIGHT

NO. 51, 53, 55, 57, 59, 61, 63.

LEFT

NO. 52, 54, 56, 58, 60, 62, 64.

No.	51 and 52.	53 and 54.	55 and 56.	57 and 58.	59 and 60.	61 and 62.	63 and 64.
Length of Lever	5¼	5¾	6	6¼	6½	7	7¼ in.
Size of Skate	8	8½	9	9½	10	10½-11	11½-12 in.

LINKS



Half Size of Cut No 32.

No.	30	32	34	36	38
Length of Link	3	3¼	3½	3¾	3¾ in.
Size of Skate	8	8½ to 9	9½ to 10	10½ to 11	11½ to 12 in.

HOCKEY STICKS,
PUCKS AND
SKATE STRAPS

ORDERS
FILLED
PROMPTLY

GRAHAM Wire and Cut Nails are the Best.

H. S. HOWLAND, SONS & CO., 37 Front St. West

WINDOW DISPLAY AS AN ADVERTISEMENT.

ONE of the most important means of advertising connected with any store is its show windows, writes "C. F. G." in *Iron Age*. Within a comparatively short period of time this has become a recognized fact in nearly all lines of business. In retail hardware, however, the development along this line has not been so marked as in other trades. This may be due to the fact that it is a difficult matter to make an effective window display of hardware. There are very few, if any, goods in this line which can be draped as are the cloths in dry goods or clothing displays.

MINIMIZING THE DIFFICULTY.

This difficulty can be partially overcome by covering the floor of the window with black calico or "print," as it is known among dry goods men. This should not be confused with black cambric. The calico is a dead black, while the cambric has a shiny appearance that detracts from the goods and injures the eyes. Sometimes it is well to cover the side walls of the windows with this material also. Then by means of brass screw hooks bright goods can be made to stand out well thereon. By carefully placing these hooks small articles can be arranged to form letters or designs. Some goods will show to better advantage upon red cotton flannel than upon black calico, but the flannel is more expensive and less durable. The red soon fades, and the cloth has to be replaced oftener than when black is used.

It is often well, when tacking cloth upon side walls, to drape it in folds instead of tacking it flat. This requires more material, but secures a more pliable and pleasing effect. In windows where heavy hardware and stoves are to be displayed, it is better to use a neat pattern of oil-cloth or linoleum for a floor covering.

A handsome floor can be made with pieces of tiling which are often left from tiled fireplaces or floors. These pieces should be arranged systematically. A good plan is to use white for the centre with perhaps three other colors carefully placed to form a border. These pieces are placed loosely on the floor of the window, and there is opportunity for great variation of design. The tiling can be washed with a damp sponge whenever the window is changed and cleaned. There is no handsomer floor than this upon which to show enamel bath wares and bathroom equipments. In showing these goods, however, they should be set up apparently ready for use. This makes the display much more attractive than if the goods are set in the window regardless of effect.

TOO MUCH VARIETY A COMMON MISTAKE.

One of the most common errors made by hardwaremen in window trimming is the use of too great a variety of merchandise. A window, like an advertisement, should be simple and straightforward. It should show all that can be conveniently shown about some one article before it attempts more. True, a window trimmed with a great variety of goods may be exceedingly pretty, but prettiness alone is not effectiveness; it doesn't always sell goods. To illustrate this, the two window displays of a certain hardware store noted recently will be good examples.

One window had as a centre a revolving show rack that consisted of three round tin shelves mounted upon a centre iron rod which ran through the rack and extended from the floor of the window to the top. This was kept revolving by a small electric motor that operated in plain view of the passers-by. The motor was supplied with electricity from batteries situated under the floor of the window. This rack was tastefully trimmed with light articles, and in itself was a good attraction, as a moving display nearly always arrests attention. But that was not all that the window contained. On the right was a knife case containing nearly a gross of knives of different sizes, shapes and finishes. On the right side wall were shelves filled with agate ware. Upon the left, a little towards the back, was a board covered with black calico, upon which several electric bells were displayed. From arms attached to the left side wall various articles of tinware were shown. The floor of the window underneath and around the revolving centre rack was occupied by numerous kitchen knives, cleavers, etc., carefully arranged. This window had a neat, well-kept appearance, but there is a doubt as to whether or not it was a good selling medium. The trouble lay in the fact that there was too much displayed. Although the goods were well arranged no one article predominated. In order to gain a definite idea of the contents of the window a person would have to stop and study it. This the public seldom does.

The other window was much plainer, and at first glance did not seem so attractive, yet it proved to be more effective. The principal articles shown were oil heaters and tubular lanterns. The lanterns were hung from racks in three rows across the back of the window. There were two colors, blue and plain tin. Each row was an alternate color. Two rows were hung from hooks in the ceiling of the window, the blue being hung outside and the tins back. These two rows were so arranged that one plain lantern was shown between each two of the blue. This gave the top of the window the appearance of being hung more full, and at the

same time relieved the monotony of rigidly straight rows. Each row of lanterns was plainly marked with the price, which, by the way, was a special one. On the floor of the window were a number of oil heaters, arranged in semicircular form. This added more relief to the straight lines of lanterns at the back. Three or four lanterns, hung at irregular intervals, were all that the side walls could boast of. This window sold a great many lanterns and several oil heaters.

Less work was expended upon it than upon the other. Less goods were used in its display. Yet the plain window was the more effective advertisement.

CHANGE DISPLAYS OFTEN.

Another fault of the average hardware merchant is that he doesn't change his window displays often enough. Under ordinary circumstances windows should be cleaned and redressed at least once a week. Sometimes it is advisable to change them even oftener. It is as important to keep the show windows fresh and attractive as it is to keep newspaper advertising so. It's a good plan to make the show windows co-operate with the newspaper advertising. Goods which are being advertised in the papers should be displayed in the windows. This plan will strengthen the newspaper advertisement and make it more effective. At the same time the advertisement can be made to call attention to the window display.

Large show windows are not placed solely to beautify a building, nor for lighting purposes alone. Their purpose is to display goods. They're valuable advertising media, and as such they should be cared for in a way that will produce the best results.

TO RENDER IRON WATERPROOF.

Countless attempts have been made to deal with the rust problem in iron structures. A new process has been suggested which consists in treating the iron with a solution of ferrocyanide. This forms a coating of cyanide of iron that is stated to be uniform and impermeable and of such a nature as to effectively protect the iron so covered. The solution is mixed with a flaxseed varnish to which has been added a little turpentine or benzol, so as to cause a very homogeneous emulsion which can be applied without difficulty. The evaporation of the alcohol leaves the flaxseed varnish, which forms a coat and protects the cyanide of iron which is deposited upon the metal. The iron requires no preparation for this treatment beyond removing any rust that may already have been formed, and which may be too thick to admit of the action of the ferrocyanide.—*Industries and Iron*.

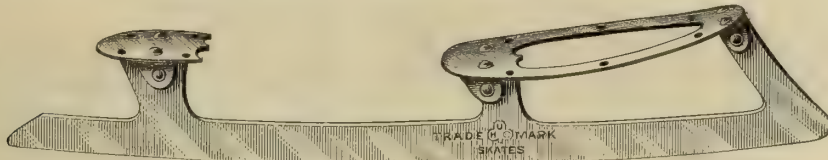
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



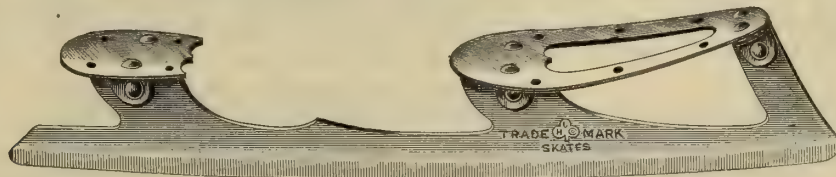
Plain Runner, Straight.



Plain Runner, Curved Blade.



Ribbed Runner.

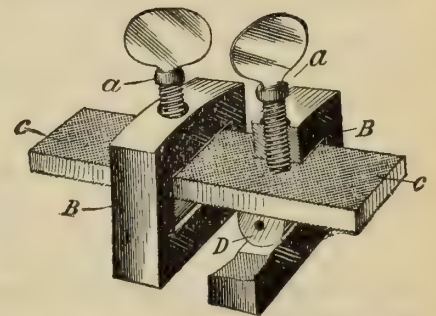


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY

THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.

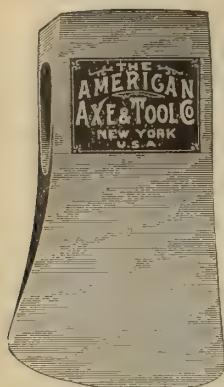
Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street

— TORRINGTON, CONN., U.S.A.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

TRADE CHAT.

THE WHITBY CHRONICLE says the Whitby foundry is in full blast again, and is expected in a short time to be the industry of the town.

The Strathroy Electric Light Co. has started its new incandescent service.

It is said in some quarters that the \$45,000 G.T.R. elevator recently burned at Goderich will not be rebuilt.

A large number of Hamilton, Ont., painters have sent a communication to the City Clerk, protesting against the firemen being allowed to paint their halls.

An electric light plant has been put in St. Francis Xavier College, Halifax, and The Herald says that the necessary steps to light the town of Antigonish are being taken.

The Hamilton Herald says an alderman of the "Ambitious City" has been informed that an Indiana glass factory is willing to go to Hamilton if satisfactory inducement is offered.

The Sackville Machine and Foundry Co., N.B., decided at a general meeting, held a few days ago, to purchase the business and property of Seaman, Murray & Co., at that place, and to enlarge the same.

Mr. Knapp, the inventor of the roller ship, thinks that it could be used with advantage between Montreal and Quebec for the purpose of keeping the ice from forming and thus maintaining an open stream for navigation all through the winter. He has submitted his plan to the Minister of Public Works.

The London Advertiser states that a Battle Creek, Mich., company meditates establishing a manufactory in the "Forest City." The Advertiser urges that the Council should endeavor to persuade the Messrs. McPherson, who were burnt out in Fingal, to start up in London.

An application was yesterday made to Sir Thomas W. Taylor, chief justice, for an order allowing the sale of the Vulcan Iron

Co., machinery and assets generally, to Mr. John McKechnie. The offer made involves a cash settlement with the creditors and shareholders to their satisfaction and also involves the payment of some \$40,000. The order was granted, and hereafter the business will be carried on by Mr. McKechnie. Cheques will be issued at once to the creditors for the amounts of their claims. Mr. H. E. Crawford, Q.C., appeared for the purchaser, and Mr. H. F. Phippen for the liquidator and various shareholders.—Free Press, Winnipeg.

AMONG THE RETAILERS.

November a Good Month.

Last week one merchant told me that he could not understand any hardware dealer saying that last month's trade was so much better than November of the past few years. Thinking this strange I asked several of the progressive hardware retailers what they thought about it. Without exception they said that November was a much superior month for trade than the corresponding period during the past couple of years. "Why," remarked one firm, "we sold in nails alone 150 kegs more than we did in November last year, and in every line our sales were in excess of former years." The stove trade has shown the largest increase, though glass is having an enormous sale.

The Prospects.

Following this up, the prospects for the Christmas trade are looked upon as bright and satisfactory. Skates and other winter sporting goods are in good demand; cow chains and other requisites for housing of cattle, horse blankets, sleigh bells, etc., are now selling freely, and, as the farmers have the money this year, a good all-round trade is looked for.

Will Meet Competition.

In conversation with a wide-awake retailer this week I asked how departmental stores interfered with his trade. "Oh," said he, "they are doing their worst, and

that's little. Now, for instance, there is skates. They are advertising skates at 40c. We will advertise skates at 29c., but we will take care, like they do, to have small sizes. And we can and will beat them out on every line they cut, because we really are in a position to buy cheaper and turn over a larger amount at smaller expense than they do."

The Progressive Spirit.

After a couple of hours conversation with men of various stamps, one is generally impressed with the presence of one quality or another among the most successful. There is the man who started in the hardware business nearly 20 years ago in the store he is in to-day who is getting a comfortable living out of it, but not seeming to grow in either riches or fame. Then there is the man who started a few years later, but who has moved twice, and three or four years ago had his store fitted up to suit the requirements of modern business, and is again talking of necessary changes. This man is not afraid to take hold of a new article, and introduce it, and he knows when an article is out of popular demand, and is rarely left by a trusted customer with the unsought-for legacy, a bad debt. His windows are bright and cheerful, and attractively dressed with goods likely to be in demand while they are in the window. He takes pride in being up to date.

THE RAMBLER.

METAL SPECIALTIES.

Metal specialties of all kinds are an important feature of a hardware stock and a complete assortment is required for an up-to-date business. H. R. Ives & Co., Montreal, are among the foremost Canadian manufacturers of these goods, making everything in the specialty line. They devote a good deal of attention to various qualities of metal brackets and can furnish the trade with wrought steel shelf brackets in black japan, nickel and copper finish. They have just issued a handsome catalogue containing a description of the various articles they make which can be procured simply by forwarding a post card.

THE STARR HOCKEY SKATE



— PATENTED —

BLADES. —Welded and tempered by our special process.

TOPS. —With patented re-enforcements, which preclude possibility of breakage, and insure light weight.

DESIGN. —In accordance with the advanced ideas of leading Canadian hockeyists.

WORKMANSHIP and MATERIAL. —Equal to our GENUINE ACME.

PRICE. —Ask your Jobber, or write direct to.....

The STARR MANUFACTURING CO., Limited

T. L. PATON, Resident Agent
MONTREAL.

DARTMOUTH, N.S.

THE JOHN BOWMAN HARDWARE & COAL CO.

LONDON, ONTARIO

Will open in a few days with a new stock of **HARDWARE.**

**No Ancient Goods
at Ancient Prices**

The travellers previously associated with Mr. Bowman will have the pleasure of calling on their old friends in a few days.

KINDLY RESERVE ORDERS.

TANDEM GEAR.

GEAR of tandems is bothering many double teams during these thinking moments. When tandems first became the rage it was a common delusion to experience that, since the number of riders was doubled the gear could be doubled without increasing the work. But riders soon found out that each had to push the same gear as on his single wheel. Of late there has been a tendency to lower the gear of tandems to less than the gears the riders would use on single wheels.

No gear will make a tandem an easy hill climber. To climb hills easily they must be taken with a rush, which carries the team up the incline and over the brow before the momentum is lost. To climb a hill slowly is almost an impossibility to ordinary riders. The lack of rigidity as compared with a single wheel, together with the failure to pedal as one, are responsible for this. Lower gears enable the riders to sprint faster on the level just before a hill is reached and they can hold the sprint longer up the hill-sides.

For a couple riding a combination tandem the best gear is the average between that of the single wheel ridden by the lady and that by the gentleman. If the lady rode a 63 and the gentleman a 70 or 73½, a combination tandem geared to about 66 or 68 would prove most satisfactory. High gears should be accompanied by long cranks. A tandem geared to 77 or 80½ should have 7-inch cranks.

ROAD RACE AT PORT HOPE.

The employees of the Globe File Co., Port Hope, who number in their ranks some fast riders, held an interesting 15½-mile road race last week over the course from that town to Cobourg and return. The road being rough and heavy owing to the late rains, the C.R.C.'s record for the distance did not as a result fall.

The following was the order of the finish, with the riders' respective times:

G. Wrycraft, 51.45, time prize; 1, C. Britton, 52.15; 2, V. Byam, 52.30; 3, F. H. Outram, 54.45; 4, G. A. Outram, 56.00; 5, H. Roddis, 52.30; 6, H. Sainsbury, 56.00; 7, S. J. Vandette, 55.20; 8, T. E. Burt, 62.00; 9, W. T. McGibbon, 58.45; 10, J. Sainsbury, 59.45; 11, H. S. Grimson, 60.45; 12, F. Gibson, 60.00; 13, S. McNaughton.

NEW SPORTING GOODS FIRM.

The latest addition to the retail sporting goods houses of Montreal is Gravel, Duquette & Duhamel, who will open at 210 St. Lawrence street on the first of next month. They will pay particular attention to the bicycle department and, it is claimed,

will be the largest emporium in Montreal, the dimensions being 115 feet long by 23 feet wide. A fully equipped repair shop will be run in connection. The firm have secured the agency for the "Snell" wheel, of Toledo, for the province of Quebec, and three other lines of different makers. Prices will range from \$25 to \$90.

BICYCLE TRAVELERS COMING.

E. N. Heney & Co. expect to handle the Monarch line of wheels again for the coming season. Travelers will be on the road shortly with 1898 models. This year's line will show many important improvements over last year's machine. This firm will likewise represent the exclusive agency for the province of Quebec and the Maritime Provinces for the Elfin juvenile bicycles, one of the best known line of juvenile wheels made. This firm also proposes adding and manufacturing a full line of saddles at selling prices that will secure the trade.

CAVERHILL-LEARMONT'S WHEELS.

Caverhill, Learmont & Co. will next season handle a full line of "Columbus" wheels, which are manufactured in Columbus, Ohio. They will also carry a medium grade wheel which, as yet, they have not decided upon. In addition they will go extensively into sundries again next season.

WILL AGAIN HANDLE THE "WOLFF."

Dorken Bros. state that trade in the bicycle department is very brisk, even at this season. Next season they will again handle the Wolff-American high art cycles and Yales, both of which gave satisfaction to the riders last season. They claim there will be several improvements on their 1898 wheel.

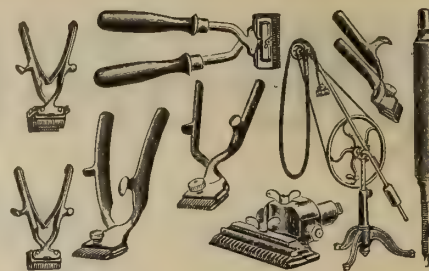
BICYCLE BRIEFS.

It is estimated that there are 52,000 wheels in Italy and they bring to the public coffers \$110,000 annually.

A Chicago negro has invented a spirit lamp stove to be attached under the saddle of a bicycle to diffuse a genial warmth for winter riding.

DOOR FOR BUSINESS BUILDINGS.

John Hillock & Co., Toronto, have built, for the Bank of Ottawa, a door, which for large business buildings is likely to prove invaluable. It is so constructed as to be storm-proof, to shut itself quietly without springs, weights or checks, and to keep incoming and out-going crowds separated, besides economizing space. It is elegant in appearance, and need not be removed in the summer. This door is now in much use in the United States, and is rapidly coming into favor in Canada, this being the fourth Hillock & Co. have manufactured.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG. CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS.** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. *Mention this paper.*

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL

Montreal or Toronto

Christmas Advertising

Make it pay by using some or all of the cuts on this page.



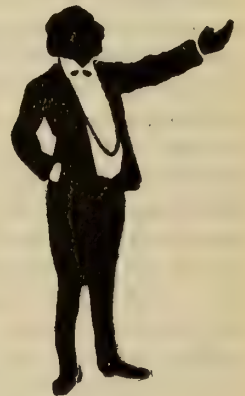
NO. 1—ONE COL. WIDE



NO. 2



NO. 3



NO. 4



NO. 5—TWO COLS. WIDE

Prices:

No. 1.—Single col. size, \$1.00;

Double col. size, \$1.50.

Nos. 2, 3 and 4.—Price, 90c. each.

No. 5.—Single col. size, \$1.00;

Double col. size, \$1.50.

Either of these cuts in any of the above sizes will be mailed same day as order received, on receipt of price, postage prepaid.

The MacLean Pub. Co.
LIMITED.

TORONTO, ONT.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Dec. 3, 1897.

HARDWARE.

TRADE in general hardware, as in all heavy goods, is usually quiet for two or three weeks following the rush that precedes the close of navigation, and the same is the case at present. This applies to practically all lines of material, such as wire nails, cut nails, horse nails, horseshoes, screws, bolts, rivets, rope, in fact, all hardware. Prices as a rule are steady, and no immediate change in this respect is anticipated. The houses here will soon commence stock-taking.

BARBED WIRE—Continues quiet, prices being unchanged at \$2.35 f.o.b. Montreal.

PLAIN FENCE WIRE—The same remarks apply to these goods. Discounts are unchanged at 30 and 10 off.

WIRE NAILS—There is little demand for these, and prices are quoted the same, at \$1.90 f.o.b. Montreal.

CUT NAILS—A small hand-to-mouth trade is doing, as the majority are well stocked up, and demand is light. We quote \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is only a moderate trade to report in horse nails, and discounts continue at 50 per cent.

HORSESHOES—There is very little demand for these, as wants are supplied for the time being. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Business is much quieter this week. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—As last reported, with discounts 12½ per cent.

BOLTS—A quiet jobbing demand is noted. Discounts are: Carriage bolts, ¼ to 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—Trade in these is of a quiet character also. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at

50, 10 and 5, and washers, 50 to 50 and 10 per cent.

FILES—Continue the same. We quote as follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There is a quiet demand for cordage. We quote as follows: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16 and upwards, 7c.; ¾, 7½c.; 5-16 and ¼, 8c., and 3-16, 8½c.

CLOTHES WRINGERS—There is little to report in regard to these. Prices are unchanged at \$29 for Royal Canadian.

SPADES AND SHOVELS—Without new feature, demand being if anything lighter.

SKATES—There is a fair enquiry for skates.

SLEIGH BELLS—Orders for these are being sent forward, but new business is light.

TIN AND IRON WARE—Enquiry for stove furnishings of all sorts continues in a quiet way.

HOLLOW WARE—A few small lots are moving.

AXES—For forward delivery demand continues about the same.

BUILDING PAPER—There is a fair demand for this material in all kinds. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.40.

HINGES—Trade fair. We quote: Screw hook and hinge, 6 to 10 inch,

\$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

CUTLERY—Sorting orders lead to a fair trade in this line.

SPORTING GOODS—Business very quiet, only a few small lots of ammunition moving.

SHOT—As last quoted: Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Trade quiet and winter rates ex store now prevail as follows: English, \$2.15 to \$2.25, and Belgian, \$1.95 to \$2.10.

FIREBRICKS—Firm at \$17 to \$21 per 1,000 as to brand.

METALS.

Business in heavy iron and metals has ruled quiet this week and there are no changes of importance to report.

PIG IRON—Buyers' wants are well filled and trade is very quiet. We quote as follows: No. 1 Hamilton, \$16 to \$16.50; No. 2, \$15 to \$15.50; Ferrona, \$15 to \$15.50; Siemens, \$15 to \$15.50; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—There is little activity to note in bar iron and prices are steady at \$1.45 to \$1.50, as to quantity.

BAND IRON—The above remarks apply more or less to this material, prices being figured at an advance of 35c. on bar iron.

HOOP IRON—Trade quiet at \$2.25 base.

SHEET IRON—Moving out quietly, but only in small lots, at \$2.25.

Christmas Goods.



Decorated Enamelled Wares

(Our own make.)

Tea Pots, Coffee Pots
Cups and Saucers
Mugs, Cuspadores
Wash Bowls and Pitchers
Toilet Sets, etc.,

with assorted decorations on white enamel and with extra decorations on fancy color enamels.

Order Early.

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER

FOR PROMPT SHIPMENT order from McClary's.

When Booking your Order for

BARB
TWIST
or
PLAIN

WIRE

insist on getting

"OLIVER"

BRAND

It's uniform in quality and finish, and price no higher than inferior brands.

A. C. LESLIE & CO.

Agents ... Montreal

Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

If you want the straightest and most durable Rawhide Whips in the market, order our

Napoleon and Monarch

WHIPS

Every Whip Guaranteed.

Patented and made only by . . .

HAMILTON WHIP CO.

119, 121, 123 Mary St., HAMILTON.

Cheap Whips of Every Style.

SHEET STEEL—A quiet jobbing demand is noted on the basis of \$2.35.

GALVANIZED IRON—Business in galvanized iron is quieter than it was, but prices are unchanged. We quote: Queen's Head No. 28, \$4 to \$4.15 in case lots.

TINNED IRON—Unchanged at 5½c. for 6 x 30 No. 24; other sizes the usual extras.

LEAD PIPE—Business of a moderate character and prices steady: Lead pipe, 7c.; composition waste, 7½c., with a discount of 27½ per cent.

PIG LEAD—There is little activity to report in this metal and prices are steady at \$3.85 to \$4.

INGOT TIN—As last quoted at 16 to 16½c., with business dull.

INGOT COPPER—A small jobbing trade is doing at 12 to 12½c.

SHEET COPPER—As before: Sheathing copper, 14½ to 16c. according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There is very little doing for prompt shipment, and orders for forward account are light also. Values are steady at \$2.10 to \$2.25.

TIN PLATE—Trade is quiet and prices steady. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., 3.80; do. I. X., \$4.80.

TERNE PLATES—Orders are few and far between, and prices nominally unchanged at \$6.

COIL CHAIN—Some fair orders are reported, but they are few in number. We quote: \$2.85 for ⅝ up.

SHEET ZINC—Moving in a small way only at 5 to 5½c.

SOLDER—Unchanged at 11 to 11½c.

SPELTER—Very little doing, but prices are steady at \$4.50 to \$4.70.

ANTIMONY—Just as it was, at 9½ to 10c.

IRON PIPE—Quiet and steady. We quote: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.45; ¾-inch, \$2.90; 1-inch, \$4.20; 1¼-inch, \$5.35; 1½-inch, \$6.90; 2-inch, \$9.35; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—It is understood that some of the rolling mills have contracted for spring shipment at close figures, but the terms have been kept private. In an ordinary way values range from \$13.50 to \$14.50.

GLASS.

Business in window glass has been less active, jobbers having cleared off practically all of the orders they had in hand. Values are firm at the advance, \$1.35 for first break and \$1.45 for second per 50 feet, with third break \$3 per 100 feet.

Cow Ties

Prompt shipment. Full line. 4 kinds. 6 sizes.

The B. Greening Wire Co., Limited
HAMILTON AND MONTREAL

Abbott & Co.

FACTORIES

— MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Casinos, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

PAINTS AND OILS.

The season's business in paints and oils is practically over, and prices generally are without alteration.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¼c.; kegs, 4½c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

There is a moderately active business doing in petroleum. Canadian is unchanged at the decline, 14c. in car lots and 15c. in small quantities, and American 16½c. in car lots and 17½c. in small lots.

COAL.

Steady as follows: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

The hide market has ruled quiet and unchanged. We quote: Beef hides, 6½ to 8½c., as to grade, and lambskins 75 to 80c. each.

MONTREAL NOTES.

Sylvestre & Fils have removed from Duluth avenue to 701 St. Lawrence street, to larger and more commodious premises, to meet the demands of their trade.

ONTARIO MARKETS.

TORONTO, Dec. 3, 1897.

HARDWARE.

WHILE trade is probably not quite as brisk as it was a week ago, yet for this time of the year a good volume of business is being done. One feature worthy of note is that orders are of larger dimensions than they were at this time last year, while they also cover a wider range of articles. Tinware and granite ware are still going out nicely. In heavy hardware business is slow in most lines. In fall specialties trade is fully up to that of previous years. Owing to the anticipated wire

consolidation in the United States there is a firmer feeling on the Canadian market, and on Thursday the manufacturers withdrew their quotations on barb wire. Prices in all lines of hardware are much about the same as they were a week ago.

BARB WIRE—The manufacturers withdrew their quotations on Thursday. There is practically no business being done.

ORDINARY FENCE WIRE, ETC.—Nothing is being done in ordinary fence wire, but a few orders are being received for hay-baling wire. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—The volume of business for tinnery's purposes is about the same. Coppered spring and coppered iron are, however, moving more freely. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—The volume of business continues to decrease. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—Are moving slowly. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—Shipments have arrived and orders are coming in nicely and in most cases can be filled promptly. Discount, 50 per cent.

HORSESHOES—Trade is not quite as active as it was, but fair quantities are still going out. We quote: \$3.25 f.o.b., Montreal, for iron shoes.

SCREWS—Trade continues fair. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, 87½ and 10 per cent.

BRASS AND COPPER WIRE—Very little doing. Discount, 12½ per cent.

BOLTS—There is no change in the situation, the volume of business still being fair. Discounts are: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts,

square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—Trade is fair, but without any special feature. We quote: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent. bifurcated, with box, \$1.25.

ROPE—Trade is only fair, with the demand principally for the smaller sizes. Rope halters and plough-line rope are still in good demand. We quote: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7½c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8½c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—The improvement noted last week has been maintained. Discount, 60, 10 and 5 per cent. Delivery points are Toronto, Hamilton, London and St. Mary's. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Trade continues dull. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Business is good and jobbers find it difficult to supply the demand in the cheaper grades. The manufacturers are also behind in their orders for furnace scoops. Discount, 45 and 2½ per cent. on spades and shovels.

FALL SPECIALTIES—Trade is still good. Skates, skate fixtures, sleigh bells, axes, saws, and cow ties are being called for regularly in nice quantities. Jobbers are still finding it difficult to supply the demand for German skates, but the delayed shipments are close to hand.

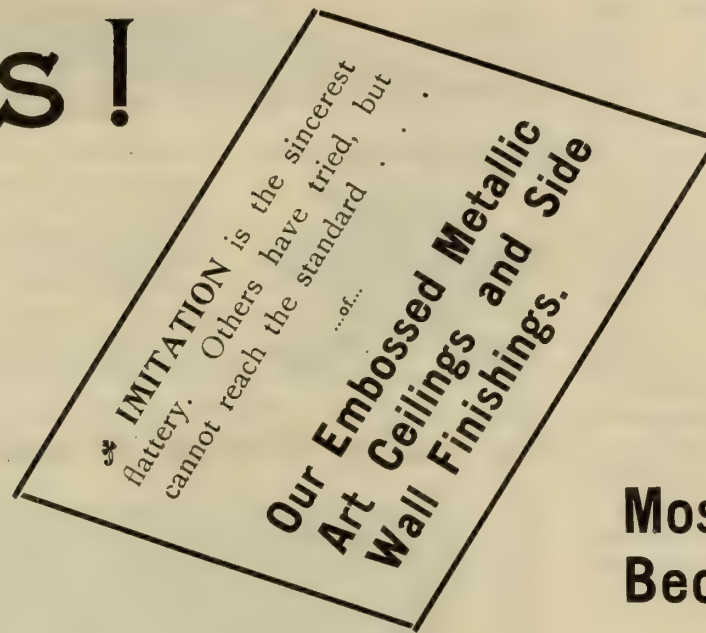
SPORTING GOODS—Trade is quiet in guns and rifles, but there is a fair amount of ammunition going out.

CUTLERY—Business is good, and the holiday trade is gradually coming into greater prominence.

SNOW SHOVELS—These are going out freely, and the demand is nearly altogether for the steel shovels of different makes. We quote \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—The inconvenience of the past few weeks, caused by the scarcity of supplies, has been overcome, several carloads of paper having been received. Jobbers are now able to fill orders promptly. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

Facts!



Most Popular Because Best

SOLE MANUFACTURERS

THE METALLIC ROOFING CO. Limited, Cor. King and Dufferin Sts., TORONTO

LEATHER BELTING—Very little doing. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

HINGES—Nothing new to note. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—The scarcity of foreign cements has sent these lines up materially. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.85; Belgian do., \$2.75; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

Trade in metals is certainly a great deal better than it was at this time last year, owing to the open weather. Prices are steady and unchanged.

PIG IRON—We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Although business has fallen off somewhat, there is still a good trade being done. Some enquiries for quotations on large lots have been received during the past week, but little or no business has resulted therefrom. We quote base price at \$1.40 to \$1.45 in carload lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Business is not quite as large as it was, but the movement is still fair. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—An improved demand is to be noted in both Nos. 1 and 2 qualities. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—While orders have not been quite as large as they were, some nice sales are reported. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Trade is still brisk, but a scarcity is still to be noted in a number of gauges and sizes in both English and American iron. Documents have, however, been received by a number of dealers, so that the difficulty will soon be overcome. We quote: Queen's Head (case lots), 16 gauge, 3¾c.; 18 to 24, \$3.87½c.; 26, 4¼c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb.

American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

STEEL BOILER PLATES—Trade continues moderate. We quote: 3¾ and larger, \$1.75 per 100 lbs.

TINNED IRON—Quiet. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6¾ to 7¾c. per lb.

LEAD PIPE AND TRAPS—Trade is only moderate. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Trade continues good. We quote pig lead at 4 to 4¼c., and bar, at 4¼c.

SHOT—Trade is moderate. We quote: Dropped shot, 6c.; chilled do., 6½c.; buckshot, 7c. Discount, 12½ per cent.

INGOT TIN—Trade is fairly satisfactory. We quote 16 to 16½c. for Lamb and Flag and Straits.

INGOT COPPER—A few good sales are reported, and in general trade is fair. We quote 12 to 12¼c.

SHEATHING COPPER, ETC.—Quite a few orders have been received for braziers', but

ordinary sheathing and roofing have been on the quiet side. We quote: Sheathing copper, 14½ to 16c., according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Trade has been exceptionally good, and prices rule firm. Stocks in the city do not appear to be very heavy. We quote as follows: Wrought, ¼ to ¾ inch, \$2; ½ inch, \$2.35; ¾ inch, \$2.87; 1 inch, \$3.87, 1¼ inch, \$5.10; 1½ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, ½ inch, \$4 to \$4.25; ¾ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; 1¼ inch, \$9.25 to \$9.62½; 1½ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—Trade is quiet. Discount, 60 and 10 per cent.

RANGE BOILERS—Trade is moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Business has been of fair dimensions. A great number who had placed import orders have not sufficient for their requirements and have been compelled to re-order. We quote: Half-polished, 52-sheet boxes, \$2.35; ditto, 60-sheet boxes, \$2.40; dull, 75-sheet boxes, \$2.50; all-bright, "Garth," \$2.90 per box; ditto, "Alaska," \$3.

TIN PLATES—The demand is fully equal to that of last year. Cokes, as well as charcoal, are being called for. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade has been decidedly quiet during the past week. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SHEET LEAD—Trade is fair. We quote: 5½c. per lb.

COIL CHAIN—Trade has improved, although not to any great extent. We quote: ¼ in., 4½c.; ¾ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade is steady. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Not a great deal doing. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Trade is much about the same as a week ago. We quote: Cookson's 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

The demand is still good, with some enquiries for plate. Prices are unchanged. We quote: First break in 50-foot boxes, \$1.35, and in 100-foot boxes, \$2.60; double diamond, under 25 united inches, \$3.80, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

STANDARD of
AMERICA
for
30 Years

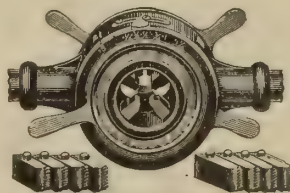
NICHOLSON



FILES

NICHOLSON
FILE CO.

Providence, R.I., U.S.A.
Largest Producers in the World



FOR PIPE.

In Stocks and Dies
there is no better than

HART'S DUPLEX
ADJUSTABLE.

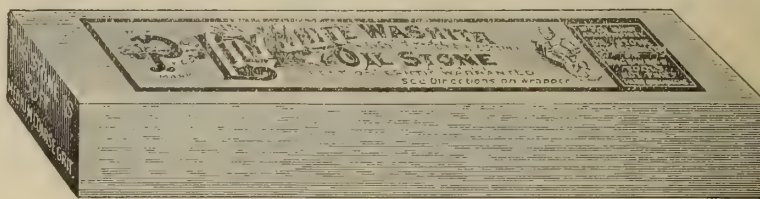
Write for Lists and Discounts
The Hart Mfg. Co.
20 Wood St., Cleveland, O., U. S. A.



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guaranteed to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable **SOLID TOP** and **SIDE EJECTION** is made to take the 38-40 and 44-40 cartridges, but also the 25 20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

PAINTS AND OILS.

The season, which has been one of the best for several years, has now quieted down considerably, though there are still some lines moving. The demand for red lead is improving, putty is still selling and quite a lot of linseed oil is going out; also a little turpentine. Very little white lead, in fact, not much of anything in paints and oils, is in demand. Though trade generally may be said to be quiet, it is not more so than usual at this time of the year. Prices remain unchanged. We quote as follows:

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders

ESTABLISHED 1860.

INCORPORATED 1895.



Steel Enamelled Teapots

"STAR"

Pale blue enamel, fancy decorated, with nickel plated covers. Just the thing for your Xmas trade. Made in all sizes. Send for sample and prices.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

Business is quiet in all lines. Prices are unchanged except for mixed rags, which have advanced 10c. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25 to 30c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¼c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¼c.; scrap lead, 2½ to 2¾c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.; good country mixed rags, 60 to 75c.; clean dry bones, 30 to 35c. per 100 lbs.

SEEDS.

As there is but little foreign demand for

alsike, it is moving slowly at from \$3 to \$4.50 a bushel. The better grades of red clover are somewhat in demand at \$3 to \$3.25 per bushel at outside points. Timothy is unchanged at \$1 to \$1.25 per bushel for machine-threshed seed.

HIDES, SKINS AND WOOL.

HIDES—The market continues firm. We quote for both cowhides and steerhides: No. 1, 9c.; No. 2, 8c.; No. 3, 7c.

CALFSKINS—We quote as follows: No. 1 veal, 8 lbs. and up, 12c. per lb.; No. 2, 10c.; Dekins, from 30 to 35c.; culls, 15 to 20c.

SHEEPSKINS—Trade is good with prices firm. We quote: Lambskins and pelts, 90 to 95c.

WOOL—Pulled wools are very quiet, though prices are unchanged. We quote supers at 21 to 22c.; extras at 22 to 23c.

PETROLEUM, ETC.

Trade is fair, with prices unchanged. We quote as follows in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; American water white 17½c.; Pratt's astral, 17c. in bulk.

COAL.

Trade is improving throughout the city. The mild weather and the scarcity of cars has kept the country demand small, but it will improve as the weather becomes colder,

as the shortage of cars is not handicapping shippers now as during the past weeks. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut \$4.46, net tons.

MARKET NOTES.

The delayed shipment of German skates is near at hand.

Quotations on barb wire have been withdrawn by the manufacturers.

H. S. Howland, Sons & Co. report they are in receipt of complimentary acknowledgments in regard to their cutlery catalogue.

H. S. Howland, Sons & Co. have been appointed agents for the Chicago flexible shaft horse-clipping machine. This machine can be retailed at \$20 and give the merchant a fair profit. The firm will carry parts as well as the machine.

UNITED STATES MARKETS.

NEW YORK, Dec. 1, 1897.

PIG TIN—The market was rather weaker, under the combined influence of liberal receipts and indifference on the part of buyers generally. Five-ton lots went at or about 13.70c. on dock and were subsequently offered at 13.72½c., without takers. Similar quantities were sold free on board at about

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

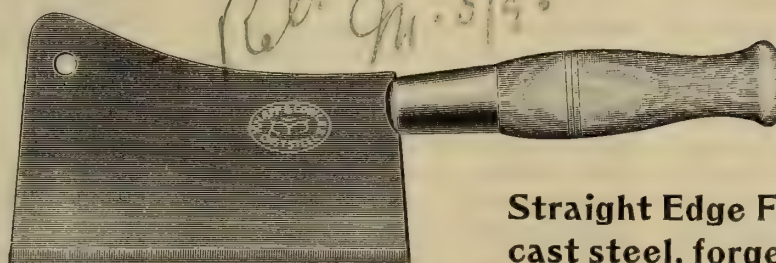
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SEND FOR

Catalogue..

of our Fall
line of

**HARDWARE
SPECIALTIES**



NO. 2 CLEAVER.

Straight Edge Family Cleaver. Best cast steel, forged; with heavy steel ferrules. Perfectly balanced.

13.80c., and smaller parcels at only slight premium. The steamer Mohawk brought 250 tons, making total importations of about 1,745 tons this month. Shipments from the Straits during the first half of November were 675 tons to the United States, 210 tons to England and 600 tons to the Continent.

COPPER—No improvement is visible in the market for ingot. Both export and home trade buyers operate in the same indifferent manner that have been for some time past, and new enquiries are mostly at lower limits of price. Competition among sellers is not particularly fierce, but close enough to assist in keeping prices rather weak. The range quoted to-day was 10¾ to 10⅞c. for Lake Superior ingot, 10½ to 10⅝c. for electrolytic and 10⅜ to 10⅞c. for ordinary casting stock.

PIG LEAD—Business was moderate and the demand very tame from all directions. There were no heavy or urgent offerings, however, and prices held quite steady at 3.75 to 3.77½c. for common. London cables were firm, quoting £13 1s. 4d. for soft Spanish.

SPELTER—There was no improvement whatever in the demand, and the market remains in dull condition, with prices rather weak at 4 to 4.10c. for ordinary and 4.20 to 4.25c. for choice brands. London cables quoted £18 for good merchant brands.

ANTIMONY—The market is quiet but steady, with prices at from 7c. for Japan to 8¼ to 8½c. for Cookson's.

TIN PLATE—A dull market is still reported and prices are weak, but showing no quotable change.

IRON AND STEEL—None of the various branches of the market present any really enlivening features. To the contrary, new business comes out slowly, and prices are still rather weak for both crude materials and finished products.

JOHN BOWMAN HARDWARE AND COAL CO.

In another column will be found the advertisement of the John Bowman Hardware and Coal Co., of London. Mr. Bowman has just retired from the wholesale hardware firm of Bowman, Kennedy & Co. and has opened up a new business under the style above given. The firm has a largely increased capital and has commenced with a new stock of hardware, etc., bought for cash. Mr. Bowman is known throughout the country, not only as a hardwareman, but for the interest generally which he takes in trade questions appertaining to the welfare of the Dominion. As the old firm had the reputation for treating its customers with kindness and fairness, no doubt the new one will be characterized by the same excellent qualities.

MANITOBA MARKETS.

WINNIPEG, Nov. 29, 1897.

YESTERDAY was marked in the history of Winnipeg as the first time a public building in this city was lighted with acetylene gas. McDougall Methodist church has just been handsomely refitted, and the Building and Repair Committee, resolving to be up-to-date in everything, decided to adopt the new system of lighting, and found it a great success. A good deal of interest is being taken in the new illuminant here, and already 60 buildings in Manitoba and the Territories are lighted with acetylene. Of course the new light had to pass the Board of Fire Underwriters before there was any chance of its general use. About a month ago these gentlemen passed favorably upon it, and clauses are being added to all insurance policies permitting the use of the new gas. It has a number of points calculated to recommend it to Manitobans, and, first and foremost, it is not in the least affected by the action of frost. This, of course, would be a great saving of expense in the laying of pipe in a country where (as an English mining expert recently expressed it) the thermometer is already 30 below with a strong downward tendency. It is very suitable for small towns, and can as readily and almost as cheaply be applied to individuals. It is safe; the machines used for generating the gas work automatically. That is, when by the action of water on the acetylene enough gas is generated to one-third fill the reservoir, the pressure shuts off the water so that no more gas can be generated until a portion of that in the reservoir is consumed, and in this way all danger of explosion is done away. Then, it is cheap. The figures as to cost just published by the agent for this territory, Mr. R. A. Wyllie, are very low, but he declares himself prepared to stand by them. According to this scale, the acetylene will be sold for \$4.50 per 100 lbs., or \$84 per ton. At this rate it will be possible to manufacture the gas at a cost of 9-20 of a cent per hour for 25 candle power light, or, to put it in another way, it will cost 65c., as against \$2.50, the rate of the Manitoba Electric and Gas Light Co. The light produced is certainly beautiful and most restful to the eye.

Trade generally is about where it was last week, with the exception that large shipments of goods are coming in from Fort William, being freight delivered there by the last steamers. This, however, has no effect on prices, as it is all lake freight. It means increased activity in the wholesale houses to get stocks into their proper places. Sales in all lines of sporting goods for winter games are brisk, and there is also a good steady trade in all kinds of goods for making

home comfortable for the winter, fancy lamps, gas and electric light fixtures, stoves and all classes of cooking utensils. In all lines of hardware, paints, oils and glass there is absolutely no change in price during the week.

Prices current are as follows:

Barb wire, 100 lbs.	\$2 60
Plain twist wire and staples.	2 75
Oiled annealed wire.	2 80
"	11 2 50
"	12 3 00
"	13 3 15
"	14 3 30
"	15 3 65
Wire nails, 30 to 60 dy, keg.	2 65
" 16 and 20	2 70
" 10	2 75
" 8	2 80
" 6	2 95
" 4	3 05
" 3	3 30
Cut nails, 50 and 60 dy	2 50
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	
Horse shoes, iron, light, medium and heavy, keg.	\$4 00
Snow shoes	4 25
Steel, light.	4 25
" extra light	5 75
Bar and band iron, \$2.10 basis.	
Swedish iron, \$5 basis.	
Tool steel, Black Diamond, 100 lbs.	8 00
Jessop	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs.	3 50
26 gauge.	3 75
28 gauge.	4 00
Galvanized American, 16 to 24 gauge.	4 00
26 gauge.	4 25
28 gauge.	4 50
Genuine Russian, lb.	12
Imitation	8
Tinned, 24 gauge, 100 lbs.	7 25
26 gauge	7 50
28 gauge	8 00
Tin plate, 1C charcoal, 20 x 28, box	9 00
" 1X	11 00
" 1XX	13 00
Canada plate, 18 x 21 and 18 x 24	3 25
Sheet zinc, cask lots, 100 lbs.	6 00
Broken lots.	6 50
Pig lead, 100 lbs.	4 25

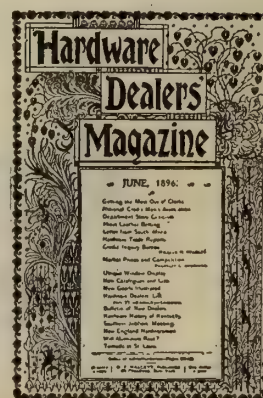
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Wrought pipe, black, $\frac{1}{4}$ inch.....	2 50
" " $\frac{3}{8}$ inch.....	2 75
" " $\frac{1}{2}$ inch.....	3 00
" " $\frac{3}{4}$ inch.....	4 00
" " 1 inch.....	5 00
" " $1\frac{1}{4}$ inch.....	7 00
" " $1\frac{1}{2}$ inch.....	8 50
" " 2 inch.....	11 50
" " Over 2 inch.....	65 p.c.
Rope, sisal, 7-16 and larger.....	6 75
" " $\frac{3}{8}$ and 5-16.....	7 25
Manilla, 7-16 and larger.....	8 25
" " $\frac{3}{8}$ and 5-16.....	8 75
Cotton, all sizes, lb.....	15
Axes, per box.....	\$5.50 to 8 00
Screws, flat head, iron.....	85 p.c.
Round " ".....	77½ p.c.
Flat " brass.....	80 p.c.
Round " ".....	72½ p.c.
Bolts, carriage.....	60 p.c.
Machine.....	60 p.c.
Tire.....	55 p.c.
Sleigh shoe.....	65 p.c.
Rivets, iron.....	50 p.c.
Copper, No. 8, lb.....	25c.
Spades and shovels.....	40 p.c.
Harvest tools.....	60 to 60-10 p.c.
Axe handles, turned, second growth,	
hickory, doz.....	2 50
No. 1.....	1 50
No. 2.....	1 25
Octagon extra.....	1 65
No. 1.....	1 25
Ammunition, cartridges, Dominion R.F.....	50 p.c.
Dominion, C.F., pistol.....	25 p.c.
" military.....	15 p.c.
American R.F.....	35 p.c.
C.F. pistol.....	5 p.c.
C.F. military.....	Net
Loaded shells, Eley's 12 gauge, M.....	16 00
American, M.....	16 20
Robin Hood, M.....	18 00
Shot, ordinary, per 100 lbs.....	6 00
Chilled.....	6 50
Powder, F.F., keg.....	4 75
F.F.G.....	5 00
Robin Hood.....	10 00
Tinware, pressed.....	70 and 30 p.c.
Granite ware, according to quality.....	50 and 10 p.c.

CANCELLING PATENTS.

The Dominion Government, through the Department of the Interior, is cancelling a large number of overdue time sales on land purchased in the early 80's, but which have been held principally by speculators, and not by bona-fide farmers. This is particularly true of the districts east of Emerson,

around Stonewall, and north of Swan Lake, in Lorne municipality. The land agent in the latter district has notified all the parties this week that their land patents will be cancelled in a few days if some explanation is not forthcoming. Already 200 sections have been thus dealt with, and the policy will be continued until all such portions of the province are made suitable for settlement.—Free Press, Winnipeg.

BOYCOTTING U.S. WHEELS.

The Cycle Manufacturer makes the most of a bad case in its apologies last week for the management of the National Cycle Show in excluding American machines from that exhibition. Want of space is the chief plea, and, coupled with that, the alleged injustice of excluding English supporters of the annual exhibitions. Our criticism is that the action is bad tactics, for no one is quite so childish as to believe that this wholesale exclusion of foreign-made machines is not aimed at those machines as a class, and no amount of protestation will wipe out the impression in most minds that English manufacturers are afraid of the competition. Far better have strained a point and admitted the American machines, even if some of the stands of English manufacturers had to be curtailed a little, rather than such an impression should get abroad. The Cycle Manufacturer adds: "We should not be at all surprised to hear that the American firms over here had arranged to hold a show among themselves." Nor should we. And when they do, as they certainly will, it will be a very tempting show, and well "boomed," we may be sure. The "National" would have shown more wisdom to have forestalled such a move.—Hardwareman, London.

A RAILWAY TO BE BUILT.

The contract for the construction of the Midland Railway to run from Windsor to Truro, in Nova Scotia, a distance of 60 miles, has been signed by the officers of the company and by the Government of Nova Scotia. The charter of the company also gives it the broad authority to construct a line between the points mentioned, with an extension to the coal and iron fields of Pictou, and branches to the Atlantic and to the Gulf of St. Lawrence.

It is intended to commence construction as soon as right-of-way has been secured over the entire route, and it is hoped to be finished and have stock rolling inside of twelve months. As the curves and grades are favorable, and as the intention is to have road-bed and rolling stock first class, it is expected heavy trains will be hauled over the line at a high rate of speed.

GRAHAM NAIL WORKS MOVING.

The Graham Nail Works, of Toronto, are moving this week from 1015 King street west to Dufferin street. The new factory is of brick, and is situated north of King street, near the Metallic Roofing Co.'s premises. The building is much more compact and commodious than the one being vacated, and will enable the firm to improve its manufacturing facilities. The factory will be in running order about January 1, and the present stock of machinery will be supplemented by new and improved machines. Particular attention will be given to the coating and blueing of wire nails, while cut nails, up to the ten penny description, will hereafter be manufactured.

"I am pleased to say that the 250 Rifleite which I have been using in the Miniature Ammunition for 303 Service rifle practice indoors, has given most satisfactory results. The strength is superior to any other smokeless powder I have ever used. There is almost no fouling, and what there is of such a character as to be easily removed by drawing a rag through the barrel after using an indefinite number of rounds. It has no injurious effects on the barrel, and for uniformity I could not wish for anything better. The charge I use is $2\frac{1}{2}$ grains, giving nearly 6-inch penetration in pine at 50 yards. I hope to be able to report as favorably on the 303 when I can give it a fair trial with full Service charge on an open range."

Signed, F. H. HAYHURST,

Staff-Sergt. 13th Infantry.

The Smokeless Powder Co., Limited,
DASHWOOD HOUSE, NEW BROAD ST.
LONDON, E. C.
WORKS—BARWICK, HERTS.

Wholesale Agents
for the Dominion

LEWIS BROS. & CO.

30 St. Sulpice St., MONTREAL.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Electric Elevators, Public Building, Victoria, B.C.," will be received until Monday, December 22 next, for the construction of two elevators at the Public Building, Victoria, B.C.

Plans and Specification can be seen and form of tender and all necessary information obtained at this Department, and at the Public Works Office, Victoria, B.C.

Persons are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honourable the Minister of Public Works, equal to five per cent. of amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

E. F. E. ROY, Secretary.

Department of Public Works, }
Ottawa, Nov. 28, 1897.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.
(50)

Job Sleigh Bells

FOR SALE

Two Thousand Straps.

Body Straps, 24 to 60 Bells, different patterns, 50c. to \$1.00 each.

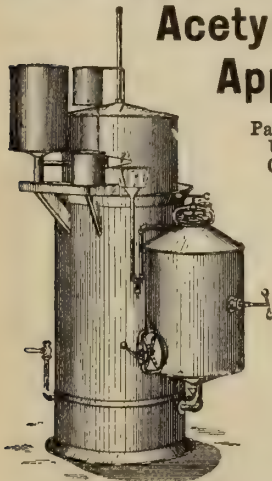
Back Straps, 12 to 21 Bells, different patterns, 20 to 50c. each.

Shaft Open Bells, 2, 3 and 4 Bells, 10 to 20c. per pair.

Will forward not less than fifty straps assorted at above prices. Address

WALTER GROSE - MONTREAL

The Niagara Falls Acetylene Gas Apparatus



Patented in Canada,
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Great Britain.

This is the only machine perfectly automatic in its action, requiring little or no attention. Machines always in stock from 5 to 100 light. Larger sizes on short notice.

Acetylene Gas the
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NIAGARA FALLS ACETYLENE GAS MACHINE CO.

Niagara Falls, Ont.

Limited

TEST BARS IN THE FOUNDRY.*

By DR. R. MOLDENKE.

THE progress of the iron industry is such that it will not be long before strict specifications govern the production of castings for structural and other work, and founders might then wish they had made the first move toward standard methods of testing their work. To illustrate this more fully: Suppose an engineer is getting up a set of specifications for the cast iron work of some structure in which the castings are subject to tension. As there is little information to be had on this point, he first obtains a lot of samples, tests them, and very likely, knowing little or nothing about iron mixing and founding, selects the piece giving the highest tensile strength for his standard. Suppose this to run 30,000 pounds to the square inch; straightway he will write 32,000 and hold the founder for its production. The original test piece was probably a white or at least hard iron, strong to the pull, but unfit for shock; consequently, instead of obtaining what he really should have, a serviceable, sound, strong casting, he calls for just the reverse.

So you see that by leaving the question of judging cast iron to those not acquainted with foundry practice, undesirable and positively injurious results may follow. Is there any wonder, then, that where cast iron is to be used for constructions subject to shock, a factor of safety up to 20 is currently found necessary. All this reacts on the founder himself and retards the use of his product.

If you are asked to furnish castings, and are required to pour test bars with the same iron for the information of the buyer, you can easily manipulate these bars to a sufficient extent in the direction of the qualities called for to cause a considerable difference between them and the actual castings. The object of a standard set of specifications for the preparation and shape of test bars, to cover all branches of the trade, has for its main object the protection of the buyer and of the conscientious founder who wishes to stand on the merits of his product.

The nature of the mold, the heat of the iron, the style of the test bar, the method of molding and casting it, and a number of conditions known to the founder, and to him only, have an ultimate effect on the test bar which may cause the rejection of good sound castings as easily as their acceptance, and endless would be the disputes between buyer and seller if this matter is not satisfactorily standardized.

It is to be understood that it may be some time before the general foundry trade is required to work under specifications, and many branches of the industry in which the

* Paper read before the Pittsburg Foundrymen's Association

WE MANUFACTURE

Wrought
Steel
Shelf

BRACKETS

— IN —

BLACK, JAPAN, NICKEL and
COPPER FINISH.

All sizes in stock. Send for prices.

H. R. IVES & CO.
MONTREAL

-- 50th --

ANNIVERSARY!

ONEIDA COMMUNITY

1848!

Limited

1898!



S. Newhouse

50 YEARS ago Sewall Newhouse, the celebrated hunter and trapper, was making traps for himself and for sale to the Indians, in his little blacksmith shop near Oneida Creek. He made each part by hand, forging the springs from old axe-blades.

50 YEARS ago the Oneida Community bought some Indian lands from the Government, and started their enterprises on the Oneida Reservation. Mr. Newhouse joined the Community, and the Community began to make traps. To-day the **NEWHOUSE TRAP** is the main reliance of trappers, not only in America, but in every country of the world.

Newhouse Traps

are sure to go and sure to hold.

IN STOCK

“ALASKA”

All Bright Canada Plates
Russia Iron Finish

18 x 24 x 52 sheets.

The finest made.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

Samuel, Sons & Benjamin

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30 Front St. West TORONTO.

OUR WRAPPING PAPERS ...

possess a peculiar toughness
adapting them for the HARD-
WARE TRADE.

The long fibre we make
them of is responsible for this.

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PRINTED or UNPRINTED.

The E. B. EDDY CO., Limited

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Halifax, Winnipeg, Victoria, Vancouver, St. John's, Nfld.

intimate knowledge required is not available to outsiders may never be called upon to work to closely drawn lines. Yet that this time is coming must be patent to all who have watched the trend of things for the last decade.

The buyer is quick to note any improvement made in a product, as shown him by an anxious seller, and when his knowledge becomes public property it is better to find the founder prepared than to allow the general disturbance in the trade which is sure to result. Again, it is to be hoped that the founder may yet have time to solve some of the numerous and perplexing questions arising in the course of his work before he is called upon to guarantee results which at the present time he very much desires, but cannot always attain.

The question of working out such standards means very much and hard study. A review of everything now known to us here, and to our friends across the water, would form the starting point. An exhaustive discussion of the question in the individual associations would bring out many points, which, if properly collected, could form the basis of a series of experiments to obtain the data necessary. To be effective, however, action must be taken under authority, and with the influence of the national body of foundrymen. For with this, and later on international action, a code of such authoritative standing would result that foundrymen all over the world would find in it protection from the annoyance of having their hands tied in their own works by inspectors watching their production of work based upon a variety of more or less stiffly drawn specifications.

Several years of patient investigation, comparison and careful study will be necessary to arrive at a proper set of recommendations for national and international approval, and this latter part of the programme is not so difficult for us Americans as might be supposed, for there are a number of foundrymen in the national body who are at the same time members of the International Society for Uniform Methods of Testing Materials of Construction. In the next, the Paris meeting of 1900, they could ably take care of the American foundrymen's interests, provided the folk on the other side be asked to work in harmony with us from now on.

To allay the mistrust on the part of conservative foundrymen, it may be stated that the proposed action is not to make cast iron rules regarding the strength or quality of the product of foundries, but only to fix absolutely and authoritatively the shape and method of preparation of the test piece, from which the casting may be judged. We are all anxious to get out the best and

strongest castings, but it would surely be asking too much of us to tell everybody what results we were getting, unless we were so inclined.

Now for another side of the question. Going back to the basis of the foundry business—the pig iron—we find that there is a great difference in the behavior of irons made by various blast furnaces, even where the chemical composition is identical. This can be traced in a measure to the ores, fuel and fluxes used. Then, also, the method of running the blast furnace has much to do with the resulting pig metal. If, now, there is this difference in the strength of irons of the same chemical composition (and I have found it again and again), the founder can demand protection from the poorer grades by calling for standard test bars for comparison with brands of known excellence, and the producers of high grades of iron will be glad to avail themselves of the opportunity to offer them and thus reap the profits coincident with conscientious high-grade work.

Then will come about quickly a marked change in the blast furnace industry, so far as foundry irons are concerned, and when job lots of "off" casts are offered, a practical guarantee of their suitability for foundry purposes will be demanded, and, in fact, offered, for I will repeat here that the chemical composition alone is not enough to determine the quality of iron. An account must be taken of the physical characteristics also, so that by the combined use of chemical analysis and physical tests, as obtained from proper test bars, we have the best guide for the production of the kind of work we are after.

So, while at first the adoption of a standard system of preparing test bars seems an undesirable innovation in the foundry business, the results which come from it will be beneficial in the end and mean increased business for the progressive part of the trade.

WORK ON CROW'S NEST PASS.

A gentleman who has returned from a trip along the Crow's Nest Railway said yesterday that excellent progress was now being made by the contractors, mostly all of whom are Winnipeggers, under the direction of Manager Haney. The grading is at present finished to the summit of the mountains, to Crow's Nest Lake, a distance of 72 miles from McLeod. Grading parties are strung out all along to the crossing of the Kootenay River. The rails are laid to Pincher Creek, 22 miles from McLeod, where the work is stopped by the construction of a big bridge, which is one of the heavy parts of the road. Work is also being pushed in an easterly direction from Kootenay Lake, and

the wagon road has been made 30 miles. This is always the first part of railway construction, a road to bring in supplies to the camps.—Free Press, Winnipeg.

GUELPH ROLLING MILLS SOLD.

Another act in the unfortunate Guelph rolling mill venture was enacted the other day, when the property was put up for sale by auction and knocked down for \$9,700.

The mills went into operation in January, 1896, but they soon had to be re-organized and more money put into them, but in spite of all, in May last they were finally closed, and last week they were finally disposed of by the auctioneer's hammer.

The figure at which the mills sold was less than 19 per cent. of the amount of money invested in the mills, which is computed at \$48,000. It is said the stockholders will lose everything, but it is expected the creditors will receive about 85c. on the dollar. Mr. Taylor, the purchaser, was engaged for some time at the works, and it is understood that he made the purchase on behalf of two or three local men, who entertain the idea of starting the mills up again. It is hoped that they will be enabled to carry out their scheme and place the enterprise, in which so much money has been sunk, on something like a paying basis.

THE ROLLING MILLS WON.

In a suit recently before the Quebec Court of Review, the Montreal Water and Power Co. claimed \$11,739 for water rates from the Montreal Rolling Mills Co. In 1879 the defendants entered into an agreement with the owners of the water-works in Ste. Cunegonde to be supplied with water at \$400 per annum. The plaintiffs later came into possession of the water-works system, and, basing their claim on a water works bylaw, they claimed \$7,000 per year from the defendants. The court ruled that as this and other manufacturing establishments had been erected on the Lachine Canal bank by special permission of the Dominion Government, which had authorized them to employ whatever water they might need for motive power from the canal, the Ste. Cunegonde bylaw did not confer on the plaintiffs the power to collect the same rates from them as it did from the citizens who used water for domestic purposes.

BOARD OF TRADE FOR PICTOU, N.S.

Pictou, N.S., has organized a board of trade. Fifty years ago Pictou had a similar organization. The officers are:

President—H. H. Hamilton.
Vice-president—G. R. Chisholm.
Secretary—Chas. W. Ives.
Council—A. J. Craig, A. C. McDonald, Adam Carson, Fred McLennan, James Yorston, Jas. A. Fraser, John R. Davies, John A. Stalker.

AN IRON WILL.

ONE secret of England's great power over her colonies and those of other nations has been her indomitable will; her grasp is like that of Destiny. But she does not always remember that her children are of the same blood, or she would have hesitated to arouse the spirit voiced by Patrick Henry: "Is life so dear or peace so sweet as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take; but, as for me, give me liberty or give me death." Animated by such a spirit, the American colonies could not be conquered, as Chatham, himself a man of iron determination, clearly understood. It was the weak, vacillating, obstinate and stupid George III who precipitated the conflict, from which his Minister sought to dissuade him, "Four regiments will bring them (the colonies) to their senses; they will only be lions while we are lambs."

"Impossible," said Napoleon, "is a word found only in the dictionary of fools." He would have melted the rocks of St. Helena before he would have remained a prisoner there had he not lost that imperious will before which all Europe trembled.

When General Grant took command of the Northern armies the Confederates knew that their doom was sealed, for in that mighty will they felt the grip of fate. "On to Richmond!" was his watchword. Old commanders shook their heads, but the silent man with the iron will, who never knew when he was beaten, swerved not a hair's breadth from his purpose until Lee surrendered his sword at Appomattox.

At the close of the Revolutionary War, that consummate debater and unequalled master of sarcasm, the younger Pitt, began his long administration as Prime Minister of England. His policy was strongly opposed to the French Revolution. But, at the end of many successes, Austerlitz proved his death-blow. Hearing of Napoleon's victory, he pointed to a map of Europe and said, "Roll up that chart; it will not be wanted these ten years." He then fell in a stupor, from which he awoke but once, murmuring faintly, "Alas, my country!" Napoleon's supreme will had overborne and crushed a mind and will of the very highest order; a mind sagacious enough to measure very accurately the force of events, as it was, almost to a day, ten years to Waterloo.

Tupper may be a little old-fashioned, but he has written four lines which can never die:

Confidence in conqueror of men victorious over them and in them;
The iron will of one stout heart shall make a thousand quail;
A feeble dwarf, dauntlessly resolved, will turn the tide of battle,
And rally to a nobler strife the giants that had fled.

—Pushing to the Front.

Flat Brushes that stay Flat

The more money you save for Painters the stronger will be the tie that binds them to trade with you. Boeckh's Patent Flat Bridled Brush stays flat—always. The patent bridle prevents bulging in the centre. You can take the bridle off in a minute to clean the brush or to trim it down. Send for free illustrated book about it.

Chas. Boeckh & Sons, Mfrs.
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RAZORS SCISSORS POCKET CUTLERY

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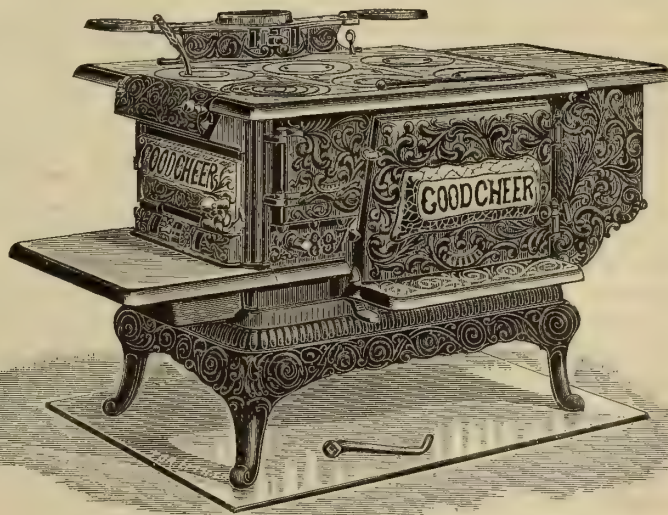
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Wood, Vallance & Co., Hamilton, Ont.

Good Cheer Ranges

LARGE STEEL OVENS

Threestyles each — Square and Reservoir, with or without High Shelves or Closets, Coal and Wood, or Wood only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT

GREAT BRITAIN'S OPPORTUNITY IN CANADA.

MR. JAMES MUNRO (Munro Bros.), New Glasgow Wire Works, New Glasgow, Nova Scotia, has been making a short stay in this country, and calling at our offices late last week he was interviewed by one of our staff. Mr. Munro is an active member of the commercial community of Nova Scotia, and combines the attractive qualities of being keenly interested in business and yet keeping his heart open to those social claims which too often in these days get elbowed out of the way. He therefore takes a calm yet pronounced view of the present position of Canadian trade, and regards the future of it in relation to Great Britain with all confidence. The 'cute man of business that he is may be partly judged from the splendid advertising matter that is issued in connection with his firm's business, samples of which were reviewed under the head of "Enterprising Ironmongers" in our issue of Oct. 9, page 49, and partly from the promptitude exhibited in visiting this country so as to be well abreast of everything that is moving to-day. Such a visit as he has paid will enable him, he observed, to get well at the bottom of things as they are, and to keep moving forward "all the time."

The wisdom of such a course cannot be doubted, but Mr. Munro, so far from wishing to profit alone, expressed the unselfish desire that the British manufacturer should participate to the full in all the directions that will be opened to him by the generosity of the Canadians. The manufacturing business of Munro Brothers is wire production, and anything and everything turned out from that kind of raw material is made on the premises. But a large factoring business is also done, and Mr. James Munro has been busy on this side of the Atlantic in arranging transactions on the Clyde, in Lancashire, and in Birmingham, chiefly with an eye to the opportunities that will be special to Great Britain next year.

It is unnecessary to detail or even to suggest the points of general relationship between Canada and the Mother Country. The strain of patriotism has been uplifted, and the pulsations of unity are vigorous. Accordingly the desire is all the more expressed that Great Britain should possess herself of all that is to lie at her feet. But, as a little wholesome criticism may prove an incentive to additional zeal, Mr. Munro does not conceal the fact that the Britisher has rather neglected the Dominion market. The United States and the Belgian, the French and other continental makers have made bold bids for the trade, to the detriment of Great Britain, and with a marked degree of success in various lines, though not in all. Such makers know what is required. The

Britisher does not know to anything like the extent his competitors do, and there are many little difficulties to be overcome. Individually the difficulties are of no great importance, but in the aggregate they make a substantial volume. Little devices and movements—not tricks of trade or anything approaching dishonesty—are introduced in the direction, say, of labor economy and of mechanical production, and these make themselves felt where cheap lines are handled as they must be in many sections of the Dominion.

To visit Canada is an inexpensive journey nowadays, and attended with no sort of inconvenience, and Mr. Munro thinks that every manufacturer who either does, or contemplates doing, business with the Dominion should make himself personally conversant with the modes and manners of his brethren out there.

Canada is to go ahead, without a doubt. Up to now she has developed but slowly. The fertile lands of the eastern parts of the Dominion may, perhaps, be neglected for yet another period and make way for the energetic advancement of Manitoba, Assiniboia, Alberta and British Columbia, but, all the same, there will be movement right along the line. The climate is good and conducive to work all the year round, and the channels of commerce have not been choked by over-production, or credit damaged by slaughtered values.

The new line of steamers which is to be put on between Liverpool and Canada direct and to be subsidised by the Government will bring the two countries in closer unity, so that should the generous feelings of the Canadians fail to bring about the end they have in view the blame will be entirely at the door of the Mother Country.—Ironmonger, London.

CANADA AND THE CAPE TRADE.

Mr. G. H. Flint, of Montreal, who has just returned from an extended trip through the British and German colonies and the Transvaal, takes a most hopeful view of Canada's commercial prospects there. The United States does a considerable trade, but Canadian and British commercial methods were more acceptable. The Afrikaners do not like the general American way of drawing at sight on purchases. The sight drafts are sent by mail steamers, which necessitates paying for goods before the slower-going freight steamers arrive with them. British and Canadian traders show their faith in the people by delivering goods before demanding payment. This is fully appreciated, and there are comparatively few cases of bad faith. Mr. Flint believes there is a good opening for Canadian trade in grain, cheese, butter and such machinery as is made in the Dominion. It is almost

impossible to get first-class butter or cheese in the country, and eggs are scarce and dear. The current price of eggs in Cape Town was equal to about 2s. a dozen, but that was regarded as exceptionally low, 3s. being the average rate.—London Financial News.

RAT PORTAGE BOOMING.

The Rat Portage Miner has lately had a good deal to say about the growth of the "Denver of Canada." In its issue of Nov. 18 it comes out with a table of figures nearly a column long showing that building operations in Rat Portage during the past season have been carried on to the extent of \$650,000.

The largest item on the list is the Keewatin reduction works, which cost \$150,000. Steamers, tugs, barges, etc., to the cost of \$100,000 have been erected. Residences, building offices and blocks, an opera house, a brewery, hotels, halls, a skating rink, churches, schools, etc., have been built to the value of over \$280,000. Mills, etc., at mines have added \$70,000 to the total building returns; new sewerage, a dock, improvements to the court house and other public buildings add another \$15,000, while the remainder is largely made up of improvements to buildings, etc., previously erected.

Some time ago Prof. Goldwin Smith, in delivering an address in Rat Portage, said: "Ten years ago my attention was directed to the great future before Rat Portage. I find that great future is still before it."

Rat Portage appears to have caught up with a portion of "the great future before it."

IRON COMPANY SEEKING CHARTER

Notice has been given in The Canada Gazette that application for letters patent will be made by a company to be called "The Star Iron Co., Limited." The company purpose manufacturing furnaces for steam heating, hot water heating and hot air heating; also radiators and other apparatus for heating houses and public buildings, with all accessories. The business will be carried on in Montreal, and the capital stock will be \$60,000, divided into 1,200 shares of \$50 each.

TO SAIL TO THE YUKON.

A schooner is being fitted out in Freeport, N.S., to carry a party of Nova Scotians and others to the Yukon via Cape Horn. The vessel is fitted with two years' supplies, and will carry two steam launches and twelve dorries. It is intended to sail as far up the Yukon as possible in the schooner, then take to the launches and dorries and go up the river to the Klondike, where the party intend to spend two years prospecting. It is expected the voyage will occupy six months.

COSTS AND EXPENSES.

A CORRESPONDENT of Ironmonger writes that journal as follows: "Referring to your article on 'Costs and Expenses' in your last issue (page 241) I have drawn up an assumed balance sheet, which is, I think, about correct, as showing the expenses of an ordinary country ironmonger's business. By this balance sheet it will be seen that the total expenses, including interest on capital, are a little over 15 per cent., or, excluding interest, a little under 15 per cent. I have compared notes with London ironmongers, and find they correspond with a very similar proportion of expense compared with the sales.

"There are one or two items in this balance sheet which perhaps require a little explanation. In the trading account the item 'wages' of course means remunerative wages for workmen whose time is recharged in the item of 'sales.' In the profit and loss account the item of 'trade charges' seems large, and, of course, an ironmonger would dissect this and do his best to keep such an item down; but when we consider that it includes such large expenses as horses, repairs to carts, stationery, advertising, traveling expenses, postages, insurance, gifts, etc., it will not be found excessive. No doubt, there are many ironmongery businesses which would show a better profit than this; but for a fair average country trade I think it is about correct, and may assist your correspondent who wishes to know the 'real expenses of carrying on an ironmongery business.'"

This is the balance sheet referred to:

TRADING ACCOUNT.

Stocks (say, 1895).....	£3,000	Sales	£7,000
Purchases.....	5,000	Stock (say, 1896)	3,075
Wages	300		
Carriage.....	200		
Gross profits.....	1,575		
	£10,075		£10,075

PROFIT AND LOSS.

Trade charges.....	£400	Gross profit.....	£1,575
Salaries	40	Apprentices' prem's..	50
Rents, rates and taxes	125	Discount for cash received.....	183
Bad debts	40		
Discount allowed to customers	100		
Depreciation of horses, carts, plant and fixtures	25		
Interest on capital, 5 per ct. on £4,000	200		
Net profit.....	515		
	£1,805		£1,805

An Eastport special to The Lewiston, Me., Journal, says that a new line of passenger and freight steamers is mentioned for next season between that place and Digby, which will connect with Halifax and the larger towns of the province by rail, and when Eastport has rail connection with the west several hours can be saved by this route.

FOR SALE.

THE BEST HARDWARE BUSINESS IN ONTARIO; no opposition; the best stand in town; stock about five thousand. For further particulars address Box D, HARDWARE AND METAL. (t f.)

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIC IRON
MONTREAL.

BRAND "C.I.F." THREE RIVERS
PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,
Managing Director and Treasurer

THE OAKVILLE

BASKET CO.,

Manufacturers of

1, 2, 3 Bushel

Grain

AND

Root

BASKETS

THE OAKVILLE
BASKET CO.



Baylis Manufacturing Co.

16 to 30 Nazareth Street, MONTREAL

VARNISHES

JAPANS

LACQUERS

WOOD FILLERS

WHITE LEAD

PAINTS

OILS

AXLE GREASE

Etc.

WRITE FOR PRICES.

INSURE YOUR LIFE IN THE
CONFEDERATION LIFE ASSOCIATION

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only--that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE--TORONTO.

W. C. MACDONALD,
Actuary.

J. K. MACDONALD,
Managing Director.

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

ROBERT SAXBY, dealer in engineers' supplies, Toronto, has assigned to M. Gardner, of Toronto, and a meeting of his creditors will be held on the 6th inst.

Ferd. Belliviano, saw miller, Sayabec, has assigned.

Monaghan & Sutherland, contractors, Halifax, have assigned.

Anthony Gillis, general merchant, Terminal City, N.S., has assigned.

Michael McKinnon, general merchant, Little Grace Bay, N.S., has assigned.

James R. Hayes, general merchant, Sandy Point, Nfld., is offering to compromise.

Geo. S. Smith, general merchant, Grif-fith, Ont., has assigned to S. T. Chown.

Wm. Genereux, general merchant, Grand Piles, Que., has made a voluntary assignment.

Pierre Dansereau, plasterer, Montreal, has filed a contestation of demand of assignment.

Aristide Belair, contractor, Maisonneuve, Que., has compromised at 50c. on the dollar.

R. Young & Son, general merchants, Caraquet, Ont., are endeavoring to compromise.

Wm. Bowen, manufacturer agricultural implements and wagons, Petrolia, is offering to compromise.

J. R. Jaynes & Co., general merchants, Alvinston, Ont., are offering to compromise at 60c. on the dollar.

PARTNERSHIPS FORMED AND DISSOLVED.

Morin & Frere, contractors, Maisonneuve, Que., have dissolved.

Clark & McFarlane, builders, etc., Summerside, P.E.I., have dissolved.

Dorais & Dobbin, electricians, Montreal, have dissolved and a new firm has been registered, composed of John Dorais and Leon G. Dorais; style unchanged.

SALES MADE AND PENDING.

J. A. Couture, hardware merchant, Quebec, has sold out to J. E. Martineau.

Samuel Campbell, blacksmith, Kaslo, B.C., has been succeeded by John Keenan.

The assets of Godfroi Caron, general merchant, Cap St. Ignace, Que., have been sold.

J. W. Danbrook has bought out Jane A. Johnston, general merchant, Newbridge, Ont.

Square, Briggs & Downs, saw millers, Canal Flat, B.C., have sold out to —. McRae.

Milton Carr, general merchant, Trout Creek, Ont., has sold out to Sexsmith & McEachren.

C. C. Woods, manufacturer of can machinery and supplies, Dundas, Ont. has

been succeeded by the Canister Machine Co., Limited.

R. Coulson, dealer in coal and builders' supplies, Niagara Falls, Ont., has sold out to Tallman & Co.

The stock belonging to the estate of Mrs. H. Kains, general merchant, Treadwell, Ont., is advertised for sale by tender.

CHANGES.

Baird & Co. are opening out as general merchants in Pilot Mound, Man.

W. G. Ross, blacksmith, Shubenacadie, N. S., has removed to Dartmouth, N.S.

F. X. Dupuis has registered as proprietor of the firm Morin, Frere & Co., tanners, Quebec.

Wm. Prowse has registered as proprietor of the Sunlight and White Rose Oil Co., Montreal.

Eusebe Bonneville has registered as proprietor of the Silverine Mfg. Co., mfrs. polish, Montreal.

Louis Lebrun and Zotique Beaudet have registered as proprietors of the firm, Lebrun & Beaudet, coal dealers, Montreal.

FIRES.

S. B. Wilson & Son, saw millers, Louise, Ont., have been burned out.

J. E. Martineau, hardware merchant, Quebec, has suffered some loss by fire, insured.

The stock of J. E. Nulty & Co., general merchants, St. Johns, Que., has been damaged by fire.

DEATHS.

Wm. H. Locke, contractor, Halifax, is dead.

Andrew McFadgen, blacksmith, Geary, N.B., is dead.

Thomas H. Rice, ship builder, Bear River, N.S., is dead.

BRITISH CAPITAL WILL COME.

Mr. A. B. Fraser, a wealthy English gentleman, is a guest at the Manitoba, returning from a trip to the Pacific coast. Mr. Fraser has two sons established in business, one in Victoria and one in Vancouver, and his visit to the west this time was to establish another son in the hardware trade, in which object he was successful, having purchased the interest in one of the largest houses in Vancouver. Mr. Fraser remarked to a Free Press representative that it was a revelation to him to see the progress being made in western Canada. "I have money in England drawing half per cent. interest, and out here I have had plenty of opportunity to invest safely at 8 and 10 per cent. You will find that as soon as the British people are assured of the fact there will be plenty of our money flowing in, and I do not think you will have to wait much longer to see the dawn of that day."—Free Press, Winnipeg.

PRODUCTION OF PIG IRON.

What is to be done with all the pig iron the world is making? The German iron-masters have compiled a table of production and consumption by countries, showing a large excess of production over consumption in Great Britain, Belgium and Germany, small excesses of production over consumption in the United States and France, and excesses of consumption over production in Austria-Hungary and Russia. But these two countries have a very small consumption per capita. There are other countries, of course, and many of them, where the consumption is above the production, but like the last two countries in the above list they are small consumers. The production in Great Britain, Germany and Belgium is so greatly in excess of the consumption that large exports can alone prevent disaster. The excess of production in the United States and France is not great, but it has got to find buyers abroad or glut the home market, with results upon prices that are out of proportion to the quantity of the excess. If we accept the dictum that a people's position in the scale of civilization is marked by their consumption of iron, we observe with satisfaction that the United States heads the list with 118.8 kilos per capita. England follows close with 116.4 kilos. After a long interval comes Germany, with 91.8, and then follow Belgium with 79.1, France 55.7, Austria-Hungary 55.7 and Russia with 13.9 kilos per capita. The United States and Germany are fast increasing their production of pig iron. Here at least there is also a growing consumption of the article.—Iron Age.

LARGE LUMBER SHIPMENTS.

A despatch to The Halifax Chronicle from Parrsboro, N.S., says: The deal shipping for the season from this port is finished, and what promised to be the largest shipment by about one-third, was considerably reduced by the heavy fall in the price of lumber in about the middle of the season, and on this account fully ten millions of deals are held over expecting a rise in the price by spring. But notwithstanding this, Parrsboro has again this year forged ahead another notch and has shipped 44,397,133 feet, against 43,315,244 feet in 1894, and in round numbers 1897 has beaten 1896 by a million feet. In carrying this there was employed 33 vessels of 40,598 tons register and comprising the following class: 10 steamers, 4 ships and 19 barques. Below is a list of the shippers, the number of vessels loaded by each, the tonnage and the cargo carried:

Shippers.	Vessels.	Ton.	Cargo.
W. McKay.....	14	19,184	22,091,171
George McKean.....	18	19,767	20,846,918
A. C. & C. W. Elderkin....	1	1,647	1,459,044
	33	40,598	44,397,133

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.

Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

BRITAIN'S MACHINERY EXPORTS.

Commenting on how the export machinery trade to the United States has been almost lost by Great Britain, The Iron and Coal Trades Review, London, says in part: "It is curious how long the Board of Trade sticks to a classification after it has become obsolete and useless. I am reminded of this custom by an examination of the items which show our exports of machinery to the United States in the usual monthly returns. Practically, we have long ceased to export machinery of any kind, except some textile machines, to that country, and yet the almost infinitesimal values of our exports thereto are still separately recorded, as if they were of real account. Here are some of these items for the first ten months of 1896 and 1897:

	1896.	1897.
Locomotives	£7,724	£597
Agricultural engines.....	178	15
Other descriptions of engines..	8,348	5,643
Agricultural machines	332	220
Mining machinery ..	1,190	70
Textile machinery	443,024	179,765
Other descriptions	35,114	38,981

Now, it seems to me that practically no useful purpose is served by retaining the first five of these items. Textile machinery is still a considerable business, and so, also, in a minor degree, with other machinery to which we obtain no clue. But the United States have reached a point at which no other nation can render them mechanical assistance."

BIRMINGHAM GUNMAKERS AND AFRIDI "SNIPERS."

Whence come the guns of modern manufacture that are doing such execution among our troops on the Indian frontier? It is positively stated that they are shipped from Birmingham. The statement, however, must be received with caution, for it comes from an anonymous person, described as a "well-known Birmingham gunmaker." That gentleman states that the Afridis' rifles are fitted with old Martini actions, which were bought some years ago from the British Government by another "well-known Birmingham gunmaker" as waste-material. The authorities had ordered that the actions should be smashed before being sold, but this order is alleged to have been carried out very imperfectly, the majority of the actions being scarcely injured at all. The Indian Government some time ago forbade the importation of rifles sighted over 300 yards, and since that order was issued the business has been diverted from Bombay and Calcutta to the ports of the Persian Gulf, whence the rifles are conveyed further through Persia and Afghanistan. One firm in Birmingham are said to have sent 300 rifles and 1 ton of ammunition monthly to the Persian Gulf for a considerable time.—"Vulcan" in Ironmonger.



VanTuyt & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties Cordage and Twines.

LONDON



IRON FENCING and all kinds of

Iron, Wire and Brass Work

Address—Toronto Fence and Ornamental Iron Works

(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

IF YOU WANT TO

ADVERTISE anything, ANYWHERE

in Canada, we can do it for you.

MacLEAN PUBLISHING CO. Limited.

ADVERTISING DEPARTMENT

MONTREAL - TORONTO



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

PLUMBING AND HEATING CONTRACTS.

ALFRÉD BLAIS & CO., of Montreal, have secured the contract for plumbing, heating and ventilating a factory for H. J. Fish & Co.

A. Mackay & Co., of Montreal, have the contract for heating the town hall, fire hall and chief's house, Maisonneuve.

T. O'Connell, of Montreal, has received the contract for two No. 16 Buffalo boilers for the Land and Power Co., Lachine Rapids, and the plumbing and ventilating of a house for J. P. Cuddy.

PLUMBING AND HEATING NOTES.

John Stewart has commenced business as plumber, etc., at Westmount, Que.

Ann McGinniss has registered as proprietress of the plumbing firm, M. Dube & Cie., Montreal.

The annual meeting of the Plumbers' and Steam-fitters' Supply Association will be held on the 8th inst. at the Bodega Restaurant.

Building permits in Hamilton have been issued to John Stuart for a two-storey brick dwelling on Caroline street south, to cost \$800, and to E. B. Patterson for a frame building on Niagara street for Thomas Brown to cost \$200.

The city hall, Stratford, which included an opera house as well as the municipal offices, the public library and an arcade containing stores, was destroyed by fire on Tuesday last week. Loss, about \$50,000, insured for \$30,000.

Several of the Dartmouth water pipes had to be dug up recently on account of stoppage, and it was found that eels had got into the nipples that connect houses with the main. Ald. Ritchie and Superintendent Bishop have put their heads together, and the result is a new style of nipple that will exclude eels. This will be put in all new connections, and whenever a stoppage makes it necessary to unearth the pipes.

PRETTY GAS FIXTURE DISPLAY.

One of the prettiest displays of gas fixtures in Toronto is at Fred. Armstrong's, Queen street west. His methods of displaying goods are all up to date, yet one looking through his show rooms would not fail to be

struck with the advantages of his system of displaying gas globes. He has a couple of gas pipes, neatly gilded, running along the wall, one a little over a foot higher than the other, with acetylene gas jets at distances of about 18 inches apart. A long bracket or shelf is arranged below these with a large range of globes in various colors and shapes. To show the goods ten or twelve jets are lighted, and the customer can compare the globes and can choose for herself.

THE PLUMBER IN THE WELL.

"Ding, dong, dell! The plumber's in the well!" is the rhyme that Jailer Kendrick might have sung when he found that W. A. Donovan, the popular St. Stephen (N.B.) plumber, had tumbled into the jail well, on Thursday week, but he was too busy hunting up a rope to rescue him to think of ditties. The well aforesaid is about 30 feet deep and there are, perhaps, ten feet of water in it. Mr. Donovan had occasion to lower himself into it on a ladder. He had a piece of pipe in his hand, with which he intended to make connection with the water. He had got to the bottom of the ladder when the strain upon it caused the round which held the rope to break. In an instant, plumber, ladder and pipe were in the bottom of the well. The plumber, with the agility of a cat, lost no time in climbing up the ladder, which was just about long enough to keep his head above water. In this position he remained until Jailer Kendrick "dropped him a line," when he shinnied up to a place of safety and warmth. As he received no injuries from the fall, he was prepared to say with the philosopher, "all's well that ends well."

WINNIPEG'S WATER SERVICE.

A discussion is going on in The Winnipeg Free Press in regard to the waterworks system of that city. In a recent issue a letter appears from the City Engineer, which gives the following figures to show that the city has insufficient water pipes and services:

City.	Population.	Services.	Miles.
Winnipeg	40,000	1,700	23
Portland, Me	37,000	6,200	79
Lawrence, Me	45,000	5,654	68
New Bedford, Me	41,000	8,000	76
Waterburg	29,000	4,023	38
Altonia, Pa.	30,000	7,597	47

The City Engineer claims that Winnipeg should have 4,025 services on 41 1/2 miles of pipe at least, especially as the population of Winnipeg will likely be doubled in a few years.

IS HEATING HOTELS AND MINES.

Rat Portage correspondent of The Winnipeg Free Press: "One of your hardware merchants, Mr. Wells, is here adding to the heating capacity of the Hilliard House. Mr. Wells considers that Rat Portage is all right, and that mining countries are hard to beat for work. Mr. Wells has put the steam heating into the Sultana mill; has heated the Burley Gold Mining building, the Hilliard House, the new opera house and the Hockley residence. Mr. Wells thinks that the development of our district is going to benefit Winnipeg immensely."

As a result of the inspection of the stand-pipe at the reservoir, Hamilton, Ald. Dixon and City Engineer Barrow decided that boiler-plate iron was the best material to use in the addition to be made to the pipe. Copp Bros. & Colville have made offers.

ARMSTRONG PIPE THREADING

AND CUTTING-OFF MACHINES

(Hand or Power)

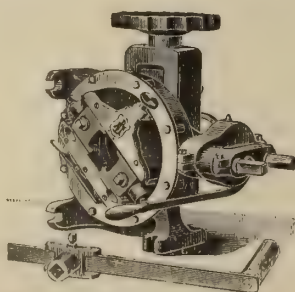
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office,
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING

Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

H.O. CANFIELD - BRIDGEPORT, CT.

SMALL RUBBER GOODS

MOULDED RUBBER GOODS

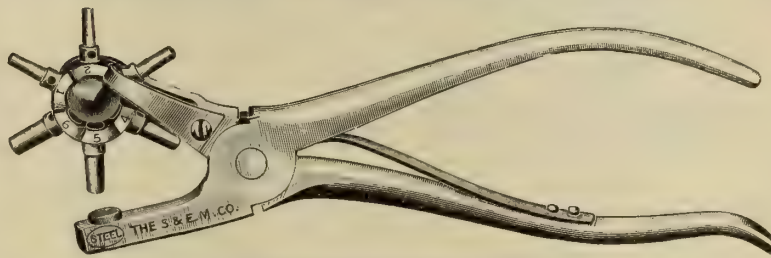
Hardware, Plumbers' and Bicycle Specialties.

OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897
CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian **HARDWARE**
AND **METAL**.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

RAW MATERIALS AND IRON-MAKING

In all iron-making countries, says an exchange, one of the most important elements of successful competition, and consequently of progressive industry, is the cost of the raw materials delivered at the place of manufacture. Germany is much better off in this respect than is generally supposed, but she does not appear to have improved her position during recent years. On the contrary, the cost of coal at the pit's mouth has been considerably more during the last five years than it was in the five years ending 1890, while there has been no difference worth speaking of in the cost of iron ores at the place of production in the same period.

A comparison of the values of the iron ores consumed in Great Britain and in Germany will show that, at the place of production, Germany has much cheaper ores than Great Britain. The average computed value per ton at the mine of the ore output of the United Kingdom during the last ten years has varied from a maximum of 5.69s. in 1890 to a minimum of 4.54s. in 1895, whereas in Germany during the same period the average annual value at the mine has varied from a maximum of 4.22s. in 1889 to a minimum of 3.32s. in 1895.

These figures, without explanation, would seem to imply that Germany has a considerable advantage over Great Britain in refer-

ence to the economy of her iron supplies. The advantage, however, disappears entirely when we come to examine the cost of the ores at the majority of the blast furnaces.

Most of the ores used in Germany are raised either in Luxemburg or in Moselle district, while a considerable quantity comes from Alsace. The ores have either to be carried a distance of 60 to 100 miles, to the furnaces in Westphalia, or the Westphalian coke has to be carried an equally long distance to the blast-furnaces in the Saar district. As a matter of fact, the bulk of the ores is carried to Westphalia, at a cost of 3s. to 4s. 6d. per ton freight, so that by the time they are delivered at the furnaces they cost from 6s. 6d. to 7s. per ton.

As regards fuel supplies, Germany has for a number of years past been running what appears to be a neck-and-neck race with Great Britain. It is claimed that British coal is generally better than the German, and that this fact enables Great Britain to produce a better quality of iron, and to secure a larger output in the furnace. There do not appear to be good grounds for this statement. On the contrary, the average annual output of the German furnaces is greater than the average of Great Britain, and in both countries large progress has been achieved during recent years. The increased output of the furnaces in Germany has been

attributed to much the same causes that have brought about similar results in Great Britain, more especially:

1. The increase of the temperature of the blast.
2. The increase of the volume of the blast.
3. The larger heating surface of the hot-blast stoves.
4. The consequent shorter period that the charge requires to pass through the furnace (12 to 15 hours as against 24 hours).

As regards the capabilities of the German furnaces, reference may be made to the fact that those of the well-known works of Horde, which may be looked upon as a typical Westphalian plant of four furnaces, produced 178,762 tons of basic pig iron in a recent year, being an average of 47,000 per furnace, with 504 employes, so that the average annual output of pig iron per employe was 355 tons.—Kuhlow.

Mr. Wm. Livingstone, Thamesford, manager of the flax mill, has just purchased five acres of bush from Chas. Horsman. The price, it is understood, was \$20 per acre. Since effecting this sale Mr. Horsman has been besieged by applicants for similar transactions, and, as a consequence, has raised the price.

Joseph Rodgers & Sons, Limited

CUTLERS TO HER MAJESTY

Please see that this EXACT MARK is on each blade.

Upheld by injunction in the Court of Chancery.

SOLE AGENTS FOR CANADA,

JAMES HUTTON & CO., MONTREAL

CURRENT MARKET QUOTATIONS

TORONTO, Dec 3, 1897. $\frac{3}{8}$ inch and thicker..... 1 75

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

.L.S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. 6 25
I.X.X. 7 50
J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & P. D. Grades—
I.C., usual sizes 3 50
I.X. 4 25
I.X.X. 5 00
I.X.X.X. 5 75
D.C., 12 1/2 x 17 3 00
D.X. 3 75
D.X.X. 5 75

Note.—Other brands might be shaded by 25c per box.
Coke Plates—Bright.
Bessemer Steel—
I.C., usual sizes 3 00
I.C., special sizes, base. 3 15
20x28. 6 25
Charcoal Plates—Perne.
Dean or J. G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X., Perne Tin 7 50
I.X., Orion 7 50
Charcoal Tin Boiler Plates.
Cookley Grade— Per lb.
X.X., 14x56, 50 sheet bxs 0 05 1/4 0 06
" 14x60, " 0 05 1/4 0 06
" 14x65, " 0 05 1/4 0 06
Tinned Sheets.
72x30 up to 24 gauge 0 06 0 06
" 26 0 06 1/2
" 28 0 07 1/2 0 07 1/2

Iron and Steel.

Common Bar, per 100 lbs 1 50 1 55
Refined " 1 80
Horse Shoe " 1 80
Band " 1 85 2 00
Hoop " 4 00 4 25
Swedish " 2 50
Sleigh Shoe Steel " 2 50
Tire Steel 2 75 3 00
Machinery 0 10 0 14
Cast Steel, per lb 0 10 1/2 0 11
Russian Sheet, per lb 2 00 2 25
Tank Plates, 1-5 and thicker. 4 50 5 00
Boiler Rivets 0 06 1/2 0 07 1/2
" 2 0 09 1/4
" 2 1/2 0 11

Boiler Tubes.

1 1/2-inch 0 06 1/2 0 07 1/2
" 2 0 09 1/4
" 2 1/2 0 11
Steel Boiler Plate.
3-16 inch 2 00
" 1 90

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 35 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 35
All bright 3 00

Iron Pipe.

Wrought, 1/4 to 3/8 inch, \$2.00; 1/2 inch, \$2.35;
3/4 inch, \$2.87; 1 inch, \$3.87; 1 1/4 inch,
\$5.10; 1 1/2 inch, \$6.38; 2 inch, \$9.25 per
100 feet.
Galvanized, 1/2 inch \$4 to \$4.25, 3/4 inch \$4.80
to \$5, 1 inch \$6.75 to \$7, 1 1/4 inch \$9.25 to
\$9.62, 1 1/2 inch \$11.75 to \$12.25 per 100
feet.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots: Per lb.
16 gauge 0 03 1/2
18 to 24 gauge 0 03 1/2
26 " 0 04 1/2
28 " 0 04 1/2

Chain.

Proof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " " 4 75
" 5-16 " " " 4 00
" 3/8 " " " 3 75
" 7-16 " " " 3 25
" 1/2 " " " 2 95
" 9-16 " " " 2 85
" 5/8 " " " 2 75
Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards 0 20 10

Copper.

Ingot.
English B. S., ton lots 0 12 0 12 1/4
Lake Superior
Bolt or Bar.
Cut lengths, round, 1/2 to 3/4 in.
round and square 0 18 0 19
and 14x60
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.
Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " 0 15 1/2 0 16 1/2
" 50 lb. and above, " 0 15 0 16
Boiler and T. K. Pitts.
Plain Tinned, per lb 0 21
Spun, per lb 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list
Brass.
Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
ests, hard-rolled, 2x4 ... 0 20

Zinc Spelter.

Foreign, per lb 0 04 3/4 0 05
Domestic " 0 03 3/4 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/4
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb 0 05
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 05 1/2 0 06
Sheets, 3 to 6 lbs., per sq. ft.,
by roll 0 05 0 05 1/2
NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 27 1/2 p. c. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Bar half-and-half Per lb. Per
Standard 0 11 0 11 1/2
Wire 0 10 1/4 0 11
" 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal. Per lb.

"Beaver" brand \$0 20
"Tandem" A 0 19
" B. 0 16
" C. 0 10 1/2

White Lead.

Pure, Assoc. guarantee, ground in oil, Per cwt.
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 09
Brandram's B. B. Genuine 7 50
" No. 1 6 75
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
" No. 1 6 20

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 05
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 19

Colors, Dry.

Yellow Ochre (J. C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J.F.L.S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
" Umber, " 0 10
do aw 0 09
Drop Black, pure 0 09
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/2



Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs.
100-lb. cases, do. per lb.
-lb. Boxes

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish 0 65
Extra do. 0 90
Denar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 60
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net 0 42 0 43
Boiled, per gal. net 0 45 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net 0 48
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lot 0 11

Cod Oil, Etc.

Cod Oil, per gal. 0 50 0 55
Pure Olive 1 20
Neatsfoot 90

Glue.

(In bbls.)
Common 0 07 1/4 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear 0 09
Liquid Glue—R. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 t
30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B. B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c., Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent.
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Military,
Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.,
net list. B.B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap" and
"Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or gray felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....	0 60	
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 70	
9 and 10 gauges.....	0 90	
7 and 8 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.		0 10	0 12½
Per lb.....			
Anvil and Vice combined, each.....	4 50		
Wilkinson & Co.'s Anvils, lb.....	0 03	0 09½	
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10	

Augers.			
Gilmour's, discount 65 p.c. off revised list.			
Hollow Stearn's, per dozen.....	13 00	20 00	
Adjustable Stearn's, each.....	4 50	6 50	
Post-hole, Vaughan's, each.....	1 35	1 60	
Excelsior, Jennings', discount 50 per cent.			

Awls.		0 65	1 59
Sewing, per gross.....			
Pegging, ".....	0 65	1 25	
Brad, ".....	0 85	1 60	
" handled, per gross.....	3 60	3 30	
Saddler's, per gross.....	0 45	1 60	

Awl Hafts.		7 25	8 00
Patent Peg, oss.....			
" Sewing, per gross.....			

Awl and Tool Sets.		2 80	3 30
Millar's Falls, per doz.....			

AXES.		5 25	5 50
Splitting Axes.....			
Chopping Axes—			
Black Prince.....	7 25	7 50	
Forest Clipper.....	7 25	7 50	
Lance.....	8 50	9 00	
Mann's.....	8 00	8 25	
Maple Leaf.....	9 50	10 00	
Hand Made.....	7 50	7 75	
Climax.....	8 00	8 25	
Phantom.....	8 25	8 50	

Axle Grease.		6 00	13 00
Per gross.....			

Bath Tubs.		3 90	4 00
Zinc, discount.....			
Copper, discount, 40 and 10 p.c. off revised list			
Steel clad, 20 per cent. discount off revised list.			

Boxing extra			
Bells.			
Hand.			
Brass, 60 per cent.			
Nickel, 50 per cent.			

Door.		5 50	8
Gon Sargent's.....			
" Peterboro', discount 50 per cent.			

Cow.			
American make, discount 66½ per cent.			
Canadian, discount 45 and 50 per cent.			

Farm.		1 25	3 00
American, each.....			

House.		0 35	0 40
American, per lb.....			

Bellows.		3 35	4 75
Hand, per doz.....			
Moulders, per doz.....	7 50	10 00	
Blacksmiths', discount 60 per cent.			

Belting.			
Extra, 40 and 10 per cent.			
No. 1, leather, discount 60 per cent.			
Standard, 55 per cent.			
Agricultural, 65 and 5 p.c.			

Bench Stops.		5 00	6 00
Per doz.....			

Bits.			
Auger.			

Gilmour's, discount 65 and 5 per cent.			
Excelsior, discount 60 per cent.			
Rockford Common, 70 to 70 and 11 per cent.			
" Perfection, 50 and 10 per cent.			
Jennings' Gen., net list to 5 p. c. discount.			

Car.			
Gilmour's, 47½ to 50 per cent.			

Expansive.			
Clark's, per cent.			
Excelsior, 10 per cent.			

Gimlet.		0 65	0 90
Clark's, per doz.....			
Diamond, Shell, per doz.....	1 00	1 50	
Nail and Spike per gross.....	2 25	5 20	

Blind Rollers.		1 25	1 75
Annex, per doz.....			
Mascott, ".....	1 35	1 85	
Ermine, ".....	1 00	0 00	

Blind and Bed Staples.		0 7½	0 12
sizes, per lb.....			

Bolts.			
Carriage, dis. 60 and 10 to 70 p.c. off new list			
Tire, dis. 7 and 5 per cent.			
Stove dis. 70 per cent.			
Elevator, dis. 35 to 40 per cent			
Machine, dis. 70 p.c.			
Couch Screws, dis. 80 p.c.			

Boring Machines.		5 00	7 50
Complete, with augers, each.....			

Braces.		6 00	7 75
Barber's.....			
Barber's Ratchet.....	10 00	11 00	
Farmers.....	2 00	2 75	
Millar's Falls.....	15 50	29 00	

Brackets.			
Shelf.			
Japanned Canadian, per doz.			
pairs.....	0 50	3 40	
Berlin Bronze Canadian.....	0 85	3 20	

Broilers.			
Light, dis. 65 to 67½ per cent.			
Reversible, dis. 65 to 67½ per cent.			
Vegetable, per doz., dis. 37½ per cent.			
Henis, No. 3, ".....	6 00		
Henis, No. 9, ".....	7 00		
Queen City, ".....	7 50	10 00	

Butchers' Cleavers.			
From 8 to ch, per doz.....	4 23		

Butts.			
Brass.			
Wrought Brass, dis. 17½ p.c. revised list.			
Cast Iron.			
Loose Pin, dis. 70 per cent.			
Wrought Steel.			
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			
Berlin Bronzed, dis. 70, 70 and 5 per cent.			
Gen. Bronzed, per pair.....	0 40	0 65	

Can Openers.		9 00	10 00
Acme, per gross.....			
Sardine Scissors, per doz.....	3 75	4 50	

Card.		0 60	1 00
Horse, per do.....			

Carpet Stretchers.		1 00	50
American, per doz.....			
Bullards, per doz.....	6 50		

Carpet Sweepers.		22 50	
Bissell, per doz.....			
World, ".....	21 75		
Daisy, ".....	24 00		
Star.....	15 00		
Crown Jewel, per doz.....	29 00		
Grand Rapids, ".....	24 00	33 00	

Cartridges.			
(See Ammunition.)			
Castors.			
Bed new list, dis. 55 to 57½ per cent.			
Plate, dis. 52½ to 57½ per cent.			

Cattle Leaders.		8 50	9 50
Nos. 31 and 32, per gross.....			

Cement.		2 50	
Canadian, Portland.....			
English.....	2 51		
Belgium.....	2 35		
Canadian hydraulic.....	1 10		
Figures are for barrel lots.			

Chalk.			
Carpenters' Colored, per gross.....	0 45	0 75	
White lump, per cwt.....	0 60	0 65	
Red.....	0 05	0 06	
Crayon, per gross.....	0 14	0 18	

Chisels.			
Socket, Framing and Firmer.			
American, dis. 75 to 77½ per cent.			
Canadian, dis. 50 and 10 per cent.			
Tanged firmer, per doz.....	0 85	4 00	

Churns.			
Daisy or Leader, dis. from stock or factory			
60, 10 and 5 per cent.			
Steel, net.....	3 00		

Clamps.			
Judd's, dis. 20 per cent.			
Stearns, per doz.....	3 00	10 00	

Clips.			
Axle dis. 65 per cent.			

Coffee Mills.		3 60	13 00
Box.....			
Side.....	3 60	4 00	
Euterprise, No. 0.....	1 35		
No. 2.....	70		

Compasses, Dividers, Etc.			
American, dis. 62½ to 65 per cent			

Cradles, Grain.		dis. 25 per cent.	
Canadian.....			

Dies.			
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			

Door Springs.		2 00	
Torrey's Rod, per doz..... (15 p.c.)			
Coil, per doz.....	0 88	1 60	
English per doz.....	2 00	4 00	

Draw Knives.			
American, dis. 70 and 10 per cent.			
Canadian, dis. 25, 50 and 10 per cent.			

Drills.			
Hand and Breast.			
Millar Falls, per doz.....	16 00	51 50	
P. S. & W., dis. 40 per cent.			

DRILL BIT.			
Morse, dis. 37½ to 10 per cent.			
Standard, dis. 50 and 5 to 25 per cent.			

ELBOWS.			
Stovepipe.			
Per doz.....	85	1 70	

Enameline.			
No. 4-3 dozen in case.....	\$4 50		
No. 6-3 dozen in case.....	7 50		



FAWCETS.		0 30	0 35
Cork Lined, per doz.....			
Wine, per doz.....	1 30	3 25	
Star.....	2 60	3 90	
Fenn's Corkstops, No. 2, per dozen.....	1 70		
Petroleum, per doz.....	4 50	6 50	

FILES AND RASPS.			
Globe File Mfg. Co.'s dis. files and rasps, 60 and 10 to 70 per cent.			
Toronto File Co.'s dis. files and rasps, 60 and 10 to 70 per cent.			
Black Diamond, 50 and 10 to 60 per cent.			
Kearney & Foste, 60 and 10 per cent. to 60, 10, 5.			
Nicholson File Co., 50 and 10 to 60 per cent.			
Heller's Horse Rasps 50 to 50 and 5 per cent.			
Jowitt's English list, 25 to 27½ per cent.			
American, 60 to 60 and 5 per cent.			
Great Western, 60 and 10 per cent.			

FLUTING MACHINES.		0 60	2 00
Each.....			

FORKS.			
Hay, manure, etc., dis. 60 to 60 and 10 p.c. revised list.			

FREEZERS			
Ice Cream.			
Gem from \$1.25 to \$7 net.			
White Mountain, dis. 50 p.c.			
Arctic, dis. 50 p.c.			

FRUIT PRESSES.		3 25	3 50
Henis', per doz.....			
Enterprise, dis. 10 per cent.			
Shepard's Queen City, dis. 15 per cent.			

FRY PANS.			
Acme, dis. 65 to 67½ per cent.			

GAUGES.			
Marking, Mortise, Etc.			
Stanley's, dis. 50 to 55 per cent.			

GLASS.			
Window.			
Box Price.			

Star.		Per 50 ft.	Per 100 ft.
Under 25.....	1 31	2 40	3 80
26 to 40.....	1 50	2 91	4 15
41 to 50.....	2 00	3 02	4 30
51 to 60.....	2 10	3 13	4 45
61 to 75.....	2 20	3 24	4 60
76 to 100.....	2 30	3 35	4 75
Over 100.....	2 40	3 46	4 90

FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p. c.

KNIVES.

Clauss, bread, cake, and paring knives, \$7.00 doz. sets net. to 10 per cent.
 Christie, \$7.00 net.
 Hay knives, spear point, L or T handle, 60 to 60 and 10 per cent.
 Lightning, per doz. 6 50 8 40
 Heath's, 52½ p.c.

LADLES.

Melting, per doz. 1 70 4 50

LEMON SQUEEZERS.

Porcelain lined, per doz. 2 20 5 60
 Galvanized, " 1 87 3 85
 King, wood, " 2 75 2 90
 " glass, " 4 00 4 50
 A glass, " 1 20 1 30

LINES.

Fish, per gross. 1 05 2 50
 Chalk, " 1 90 7 40

LOCKS.

Canadian, dis. 50 p.c.
 Russell & Erwin, per doz. 1 75 7 50

Cabinet,

Eagle, dis. 30 p.c.

Padlock.

English and Am., per doz. 0 50 6 00
 Scandinavian, " 1 00 2 40
 Eagle, dis. 15 to 17½ p.c.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 p.c.
 Round Head, discount 20 p.c.

MAGNOLIA METAL, ETC.

Magnolia Anti-Friction Metal, per lb. 25
 No Name Metal, " 18
 Mystic Metal, " 08
 F. O. B. New York or Chicago.

MALLET.

Tinsmith's, per doz. 1 25 1 50
 Carpenters, hickory, per doz. 1 25 3 75
 Lignum Vitae, per doz. 3 85 5 00
 Caulking, each 1 60 2 00

MATTOCKS.

Canadian, per doz. 8 50 10 00
 American, 60 and 10 p.c. off list.

MEAT CUTTERS.

Enterprise, American, dis. 30 to 32½ p.c.
 German, 15 per cent.

MINCING KNIVES.

American, per doz. 0 42 2 35

MOLASSES GATES.

Stebbin's Patent, dis. per cent. 77½ per cent

NAILS.

Cut Nails (Iron). Basis—50 to 60 dy. \$1.85 f.o.b., Toronto, Montreal, Hamilton. London.
 Cut Nails (Steel). Add 10c. to the prices in list for iron nails.

Wire Nails, basis, \$2 per keg Toronto. For places outside factory points, \$1.90 f.o.b. Montreal. Carload lots, 5c. per keg less than above figures.

Brads and finishing nails, special sizes, 80 p.c. from new list.

NAIL PULLERS.

German and American. 1 85 56

NAIL SETS.

Square, round, and octagon, per gross 3 38 4 00
 Diamond 12 00 15 00

NETTING.

Poultry, 67½ to 70 per cent.

OIL.

Canada refined oil (Toronto). 0 16 0 16½
 Carbon safety " 0 18 0 00
 Canada w. w. " 0 18 0 00
 American w. w. " 0 00 0 21
 Pratt's Astral. 0 00 0 22

OILERS.

McClary's galvan. iron oil can, with pump, per doz. 0 00 19 50
 Zinc and tin, dis. 50, 50 and 10.
 Copper, per doz. 1 25 3 50
 Brass, " 1 50 3 50
 Malleable, dis. 25 per cent.

PAIS.

Galvanized, per doz. 2 25 3 30

PENCILS.

Dixon's, per gross. 1 00 4 25
 " Carpenter. 2 25 3 60

PICKS.

Per doz. 6 00 9 00

PICTURE NAILS.

Porcelain head, per gross. 1 40 3 00
 Brass head, " 0 40 1 00

PIPE CUTTING MACHINERY

Forbes Patent Die Stocks.—Curtis & Curtis Mfrs., Bridgeport, Conn.
 No. 30 Hand Machine, range ¼ to 2 in. R. & L. \$ 50 00
 No. 38 Hand Machine, range 1½ to 4. 100 00
 No. 56 Hand Machine, range 2½ to 6. 175 00

PLANES.

Wood, bench, Canadian dis. 55 per cent., American dis. 55.
 Wood, fancy Canadian or American, 37½ to 40 per cent.

Bailey's (Stan. R. & L. Co.), 50 to 50 and 5 p.c.
 Miscellaneous, dis. 25 to 27½ per cent.
 Bailey's Victor, 25 per cent

PLANE IRONS.

English, per doz. 2 00 5

PLIERS AND NIPPERS.

Button's Genuine, per doz. pairs, dis. 37½ 40 p.c.
 Button's Imitation, per doz. 5 00 9 00
 German, per doz. 0 60 2 60

PLUMBS AND LEVELS.

S. R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.

POPPERS.

Corn, square, per doz. 1 35 2 00

PRUNING SHEARS.

Per doz. 4 00 5 50

PULLEYS.

Hothouse, per doz. 0 55 1 00
 Axle, " 0 22 0 33
 Screw, " 0 27 1 00
 Awning, " 0 35 2 50

PUMPS.

Rumsey or Canadian cistern, 60 p.c.
 Pitcher spout, 70 and 10 p.c.
 Canadian cistern, 60 p.c.
 Canadian pitcher spout, \$1.25 to \$3.

PUNCHES.

Saddlers', per doz. 1 00 1 85
 Conductors', " 9 00 15 00
 Tinnners' solid, per set. 0 00 0 72
 " hollow, per inch. 0 00 1 00

PUTTY.

Bladder, per lb. 1 75 01½

RAIL.

Barn door, per foot. 0 02½ 0 03½
 Sliding door, " 0 03½ 0 04½
 Lanes, " 0 03½ 0 04½

RAKES.

Cast steel and malleable Canadian, list dis. 60 to 60 and 10 p.c. revised list.
 Wood, 25 per cent.

RAZORS.

Geo. Butler & Co.'s, per doz. 8 00 18 00
 Boker's, " 7 50 11 00
 Wade & Butcher's, " 3 60 10 00
 Arbenz's, " 9 00 18 00
 Theile & Quack's " 7 00 12 00

RAZOR STROPS.

Currier's, per doz. 1 25 3 60

RIVETS AND BURRS.

4 mos. or 3 per cent. cash 30 days
 Carriage, Section, Wagon Box Rivets, etc., (Steel), 65 p.c.
 Carriage, Section, Wagon Box Rivets, etc., (Norway Iron), 60 p.c.
 Black M. Rivets (Steel), 65 p.c.
 Black and Tinned Rivets, 60 and 5 to 65 and 5 p.c.
 Copper Rivets & Burrs, 50, 10 and 5 p.c. dis. 12½ lb. boxes and cartons, 1c. per lb. extra, net.
 Burrs, iron or steel, 55 and 5 per cent.
 Terms, 4 mos. or 3 per cent. cash 30 days.

RIVET SETS.

Canadian dis. 35 to 37½ per cent.

ROPE.

7-16 in. and larger, per lb. 6¼ 00 7¼
 ¾ in. 6¼ 00 7¼
 ½ and 5-16 in. 7¼ 00 8¼
 Cotton 15 17
 Russia Deep Sea 00 13
 Jute 6¼ 7¼

RULES.

Boxwood, dis. 80 and 10 p.c.
 Ivory, dis. 37½ to 40 p.c.

SAD IRONS.

Mrs. Potts, per set. 0 62½ 1 00
 " N.P., per set. 90

SAD HEATERS.

Dome, Shepard's, per doz. 4 75 5 00

SAND AND EMERY PAPER.

Dominion Flint Paper, 50 per cent.
 B. & A. sand, 40 and 2½ per cent.
 Emery, per quire. 0 60 0 90

SASH CORD.

Per lb. 0 22 50

SASH LOCKS.

Triumph and Morris, dis. 37½, 40 per cent.
 Kempshell's, dis. 40, 62½ per cent.
 Canadian, dis. 45, 50 per cent.

SASH WEIGHTS.

Sectional, per 100 lbs. 1 40 1 50
 Solid, " 1 10 1 10

SAWS.

Crosscut, McMillan & Haynes, per dozen 0 40 0 70
 "Empire," McMillan & Haynes, per ft. 0 00 0 70
 Hand, Disston's, dis. 12½ to 15 p.c.
 S. & D., 40 to 40 and 10 per cent.
 Crosscut, Disston's, per ft. 0 35 0 55
 S. & D., dis. 35 p.c. on Nos. 2 and 3.
 Hack, complete, each 0 75 2 75
 frame only. 0 00 0 75

SAW SETS.

"Lincoln," McMillan & Haynes, per doz. 6 00 7 50
 Whiting, " 5 63 7 00

SCALES.

Gurney Scales, 50 p.c.
 B. S. & M. Scales, 50 p.c.
 Champion 60 per cent

SCRAPERS.

Box, per doz. 2 10 4 50
 Boot, " 0 40 3

SCREENS.

Window, patent, per doz. 0 00 0 00
 Door, per doz. 0 00

SCREW DRIVERS.

Sargent's per doz. 0 65 4 00

SCREWS.

Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.
 Wood, R. H., " dis. 80 and 10 p.c.
 " F. H., brass, dis. 82½ and 10 p.c.
 " R. H., " dis. 75 and 10 p.c.
 Drive Screws, 87½ and 10 per cent.
 Bench, wood, per doz. 3 25 4 00
 iron, " 4 25 5 75

SCYTHES.

Discount, 60 and 10 p.c. revised list.

SCYTHE SNATHS.

Canadian, dis. 45 to 50 p.c.

SHEARS.

B. & W., japanned, dis. 75 p.c.
 B. & W., N.P., dis. 65 p.c.
 Seymour's, dis. 60 p.c.
 Etna, dis. 75 to 75 and 10 p.c.
 Heinisch, dis. 60 p.c.
 Bristol, japanned, 80 p.c.
 N.P., dis. 70 p.c.
 Clauss, full nickel, 60 p.c.
 japanned handles, 67½ p.c. off.
 Seymour or Heinisch tailor shears, 15 p.c.

SHEAVES.

Sliding door, per set. 0 77 1 40

SHOVELS AND SPADES.

Canadian, dis. 45 and 2½ p.c.

SIEVES.

Wood rim, black, per doz. 1 05 1 10
 tinned, " 1 25 1 35
 Tin rim, per doz. 2 30 2 45
 black, " 1 8 2 25

SNAPS.

Harness, German, dis. 35 to 37½ p.c.
 Acme, " 3 00 5 00
 Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

Per lb. 0 23 0 25

WROUGHT SPIKES.

Discount, 35 to 40 per cent.

SPOKE SHAVES.

Wood, English 1 8 5 00
 ron, American. 1 35 2 35

SPOONS AND FORKS.

Tea spoons, per gross 7 50 12 00
 Dessert, " 21 00 00 00
 Table, " 30 00 30 00
 Dessert Forks, " 24 00 00 00
 Medium " 27 00 00 00
 Table " 36 00 00 00

SQUARES.

Iron, per doz. 1 65 2 90
 Steel, dis. 70 per cent., revised list.
 Try and bevel, dis. 50 to 52½ p.c.

STAPLES.

Fence, galvanized 2 50
 Wrought iron, dis. 80 to 82½ p.c.

STOCKS AND DIES.

American, dis. 25 p.c.

STONE.

Washita, per lb. 0 28 0 60
 Hindostan, " 0 06 0 07
 slips, per lb. 0 09 0 09
 Labrador, " 0 00 0 13
 Axe, " 0 00 0 15
 Turkey " 0 00 0 50
 Arkansas " 0 00 1 50
 Water-of-Ayr " 0 00 0 10
 Scythe, per gross. 3 50 5 00
 Grind. per ton. 15 00 18 00

TACKS, BRADS, ETC.

Cheese-box tacks, blue, 80 p.c.
 Trunk tacks, black, 80 p.c.
 " tinned, 80 p.c.

B.B.B. iron carpet, blued. 80
 tinned. 80
 B.B.B. iron carpet, bright or blued (in kegs) 40
 B.B.B. iron carpet, tinned (in kegs) 45
 B.B.B. cut tacks (in bulk), 75 and 10 40
 ¼ weights 40
 Swedes, cut tacks, genuine, blued and tinned, 75 and 10 80
 Swedes, upholsterers, blued and tinned 70
 " lace 75
 " brush 50
 " gimps, blued, tinned & japanned 50
 Zinc tacks. ½
 Copper tacks. ½

Leather carpet tacks 65
 Trunk nails, black and tinned 70
 Clout nails 45
 Cigar box nails 45
 Lining nails in papers. 10
 " " in bulk. 15
 " " solid heads, in bulk. 60
 Saddle nails in papers. 10
 " " in bulk. 15
 Tinned capped trunk nails 15
 Double pointed tacks, discount 90 p.c.

TAPE LINES.

English, ass skin, per doz. 2 75 5 00
 English, Patent Leather 5 50 9 75
 Chesterman's, each 0 90 2 85
 steel, each 0 80 8 00

THERMOMETERS.

Tin case and dairy, dis. 75 to 75 and 10 p.c.

THIMBLES.

Asbestos, filled, per doz., 35 to 40 p.c.

TIES.

Cow, per doz. 1 25 2 00

TINNERS' TOOLS.

P. S. & W., 10 p.c.
 Canadian, 35 to 37½ per cent.

TINWARE.

Stamped, dis., Assn. list, 80 and 10 per cent.
 Japanned, prices on application
 Pieced, prices on application.

CALKS (Steel)

Toe calks, per M. net. \$3 85
 Heel calks, " " 4 10
 Discounts, for 10 boxes at oneshipmen 10 per cent.

TRANSMO LIFTERS.

Payson's, per doz. 2 60

TRAPS. (Steel.)

Game, Newhouse, dis. 40 p.c.
 Game, H. & N., P. S. & W., 65 p.c.
 Game, steel, 72½ p.c.
 Mouse, per doz. 0 35 1 50
 Rat, per doz. 1 40 6 50

TROWELS.

Disston's, discount 10 per cent.
 German, per doz. 4 75 6 00
 Brads' 5 00 10 50
 S. & D., discount 35 per cent.

TRIERS.

Butter, per doz. 6 25 9 00

TWINES.

Bag, Russian, per lb. 0 50
 Wrapping, mottled, per pack. 0 50
 Wrapping, cotton, per lb. 0 17
 Mattress, per lb. 0 33
 Staging, " 0 27
 Broom, " 0 30

VISES.

Hand, per doz. 4 00 6 00
 Bench, parallel, each 2 00 4 50
 Coach, each 6 00 7 00
 Peter Wright's, per b. 0 12 0 13
 Pipe, each. 5 50 9 00
 Saw, per doz. 6 50 13

WASHER CUTTERS.

Per doz. 4 00
 Washers "Iron," 40 per cent., 4 months per cent.

WELL WHEELS.

Amer., per doz., 8, 10 and 12 inch. 3 38

WIRE.

Brass Wire, 16 to 25 wire gauge, 12½ p.c.
 Copper Wire, 12½ p.c. rev. list discount.
 Annealed, annealed and oiled, galvanized small lots, 35 per cent. discount off vied list.
 [In lots of 1,000 lbs., 35 per cent. discount annealed oiled, and annealed and galvanized, freight will be prepaid when exceeding minimum rate of 20c. per lbs.]

Bright, coppered steel and spring, 35 and 5 p.c. revised list, f.o.b. Montreal, Toronto or Hamilton.

Broom Wire, per lb. 0 05½ 0 06
 Clothes Line Wire, 19 gauge, per 1,000 feet 2 75 3 00

WIRE FENCING.

Galvanized, 2 barb, 2½ and 5 inches apart. 2 30
 Galvanized, 4 barb, 4 and 6 inches apart. 2 30
 Galvanized, plain twist, all. 2 30
 Plain twist. 2 30
 Terms, 60 days, or 2 per cent. in 30 days

WIRE CLOTH.

Ordinary, discount 25 per cent.
 Painted Screen, per 100 sq. ft. 1 35

WRENCHES.

Acme, 35 to 37½ per cent.
 Agricultural, 70 and 10 to 70, 10 and 5 p.c.
 Standard, dis. 60, 60 and 10 per cent.
 Coe's Genuine, dis. 30 to 32½ p.c.
 Diamond, dis. 33½ to 35 per cent.
 Towers' Engineer, each 2 00 00
 " S., per doz. 5 80 7 00
 G. & K.'s Pipe, per doz. 6 00
 Burrell's Pipe, each 3 40
 Pocket, per doz.



CHARLES F. CLARK, President. J. CHITTENDEN, Treasurer.

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY,
Executive Offices Proprietors.

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Offices in the principal cities of the United States, Canada, the European Continent, Australia, and in London, England.

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Full of good practical hints on live subjects. Every merchant should keep himself well posted on matters concerning the welfare of his business.

The following series of pamphlets by experienced business men, deal with matters of importance to the retailer and are well worth his careful perusal.

Pitfalls of the Dry Goods Trade

Three pithy papers dealing with Credits, Honesty, Clerks, Expenses, Over-buying, Profit, Capital, etc., etc.

Buying, Selling and Handling of Teas

Three valuable articles full of ideas and suggestions for grocery men.

Causes of Failure in the Hardware Trade

and how avoided. Three comprehensive prize essays reprinted from **HARDWARE AND METAL**.

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By a practical accountant. This treatise deals with systems of bookkeeping and checking calculated to reduce mistakes and omissions, etc., etc., to a minimum. A most useful book for any retailer.

Any one of the above
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New Customs Tariff

Alphabetically arranged and revised and corrected from the official copy as assented to by the Governor General, June, 19, 1897, including the old Tariff by way of comparison. Also comparative rates of the Dingley and Wilson (United States) Tariffs.—**15 cents**.

Credits, Collections and their Management

a most complete and comprehensive work of great importance to any business man.—**\$1.50**.

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TORONTO and MONTREAL

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays **10 cents** to any address on receipt of

HARDWARE AND METAL, Toronto

Going to Retire? Want to Sell Out?

If so, say so in **HARDWARE AND METAL**. It reaches the most likely buyers. Two cents a word each insertion.

STAR HACK SAWS BUTCHER SAWS BRACKET SAWS

THE STAR HACK SAW

Has a file temper and one 5-cent blade will do more work than \$1 worth of file. It will cut off an inch square bar of steel 100 times without filing.

THE STAR BUTCHER SAW

Will cut four times as long without filing as any other kind in use. It will cut off a half-inch rod of iron 31 times.

THE STAR BRACKET SAW

Is taking the place of all other kinds.

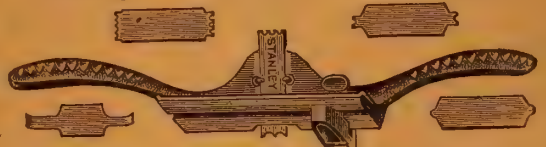
None of these Star Saws are to be filed, as the price is less than the cost of filing. They are taking the place of all other saws as fast as they become known.

For Sale by Most Hardware Dealers

We also make a Power Hack Saw which may be found in most machine shops and iron working establishments, and should be found in all.

MILLERS FALLS CO. 93 Reade Street
NEW YORK

Stanley's Universal Hand Bearer.



For Beading, Reeding, Fluting, or for light Routing.

SAMPLE
OF
WORK



DONE
BY
BEADER

SOLD BY ALL
Hardware Dealers.

No. 66. Nickel Plated, with seven Steel Cutters\$1 00

Now is the time

to look up a good "Cinder Sifter," one that will give satisfaction.

THE CHAMPION ...Cinder Sifter

is the best in the market.

Write for Price.



Manufactured
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MEAKINS & CO. - MONTREAL

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G. & H. Barnett Company

PHILADELPHIA

Twelve

Medals

Awarded
By **JURORS** at
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Special Prize

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WHEN YOU NEED



RUBBER HOSE.

OUR BRANDS

"Maltese Cross," "Extra Quality," (Black or White).

"Kinkproof," (Wire Bound)

"Lion," "King," "Leader," "Competition," "Fairy," (Cotton).

THE GUTTA PERCHA AND RUBBER MFG. CO.
OF TORONTO, LIMITED.

61-63 FRONT ST. WEST, TORONTO.

ALL SHADES

ENAMELS

ALL KINDS

We make only first-class high-grade ENAMELS, and these, like our PAINTS and OILS, cannot be equalled.

THEY

are well advertised
are well known
are well liked

So if you are not already handling them send us a trial order at once. We feel sure you will be well satisfied with the result. They are put up in Patent-opening (Penny Lever) tins which make a very neat shelf package.

The JAMES ROBERTSON CO. Limited 263-285 King Street West, Toronto

Telephones 819, 1511 and 1292.

THE PAINT MAKERS

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, DECEMBER 11, 1897

No. 50



MAGNOLIA METAL

In use by

TEN LEADING GOVERNMENTS

Best Anti-Friction Metal for all Machinery Bearings

Beware of Fraudulent Imitations.

MAGNOLIA METAL COMPANY

LONDON OFFICE—49 Queen Victoria St.
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General Dominion Agents.

Owners and Sole Manufacturers,

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IF YOU WANT the toughest and most pliable
Galvanized Iron in the market, use **QUEEN'S HEAD**

IF YOU WANT an Iron that double seams edge-
ways, crossways and always, use **QUEEN'S HEAD**

IF YOU WANT the smoothest finished and the hand-
somest mottled Iron on the market, use **QUEEN'S HEAD**

IF YOU WANT a Galvanized Iron that never
varies in weight, use **QUEEN'S HEAD**

(The testimony of a practical Iron Worker who has
fifteen years' experience and has never had a poor sheet
of "Queen's Head" in that time.)

Canada's Largest Radiator Manufactory.

ONCE TRIED ALWAYS USED.

"Safford"

PATENT
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Radiators

For Hot Water and Steam **HEATING**

They perform the work in a degree not less than perfect.
Illustrated Catalogue on application to

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Limited
Toronto, Ont.



FINE CUTLERY

SEE OUR NEW PATTERNS.

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CASES.

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Anything in....

Copper

THE range of our product is from the smallest article possible to make to the largest work ever used or required.

COPPER WORK

made to any desired specification or design.

We have always on hand a large stock of

Sheet Copper and Copper Tubing

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ROYAL COPPER TEA KETTLES

NICKEL PLATED



The steadily increasing demand for this Kettle is evidence of its durability.

If you want to increase your sales buy the ROYAL.



KEMP MANUFACTURING CO.

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SPECIAL PRICES ON

TOOL STEEL

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FILES and SAWS

IRON, STEEL
HARDWARE and BICYCLE
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Over 50 Years
of Experience

with the Canadian trade and a close
study of its demands has placed

Henry Boker

Manufacturer of

Hardware Cutlery, etc.

in a position to always offer the best values as well as
correct shapes and qualities.

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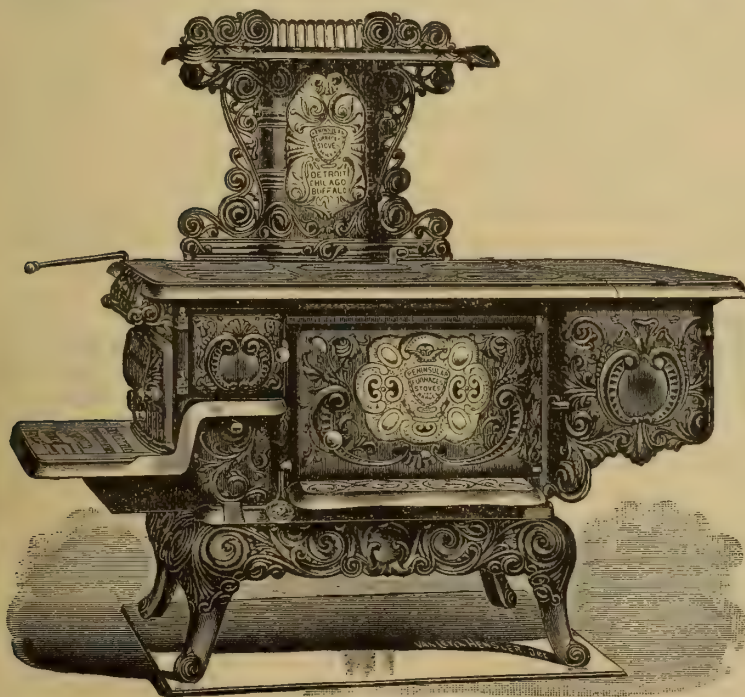
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NEW STOVES



THE GRANITE RANGE.

Modern . . .

A new Coal and Wood Cook.

Advance . . .

A new Wood Cook.

Agate . . .

A new Wood Range.

We are now prepared to supply these new
goods with same dress as the Granite
Range, which is acknowledged to be the
prettiest design on the market.

MAY WE SHIP YOU A SAMPLE ?

CLARE BROS. & CO.

PRESTON, ONT.

Bryant Bros

Think of the capacity,
up to 30,000 cubic feet!

*per A.P.
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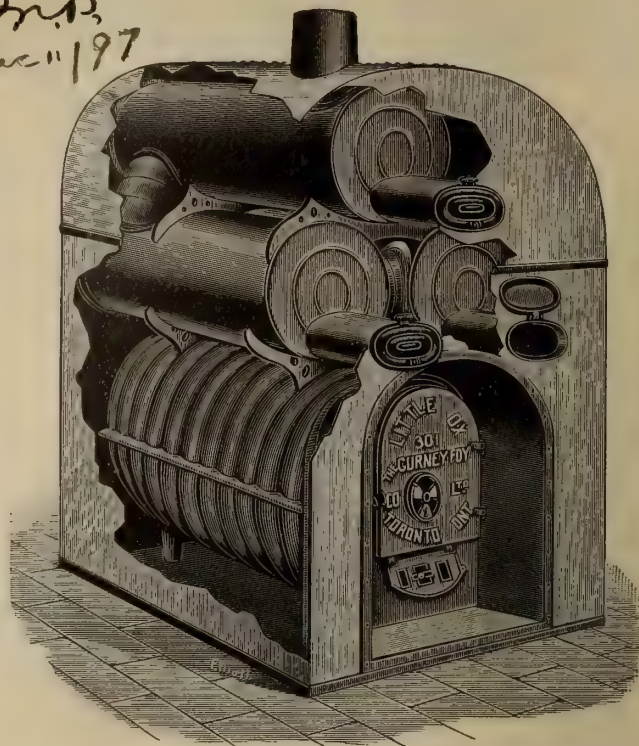
OUR . . .

LITTLE OX Wood Furnace

Is the most powerful furnace
of its class in the market.

They are portable or stationary for brick setting,
and have either Double or Triple Return Flue
Radiators, giving them an immense fire travel.

They are smoke and dust-proof, take 3-ft.
rough wood, are very easy to manage—in fact
have more talking points than any other furnace
you can find. Satisfaction is certain. Write us
for catalogue and prices.



Portable—with Triple Return Flue Radiator.

The GURNEY FOUNDRY CO. Limited, TORONTO

The GURNEY-MASSEY CO. Limited, MONTREAL.

Their . . .
Characteristic
Is . . .
Strength of Texture

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Montreal,
Toronto.



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(J. Meredith McKim) 209 Fleet Street, E. C.

MANCHESTER, ENG.

(H. S. Ashburner) 18 St. Ann Street.

Subscription, Canada, \$2.00. Great Britain, \$3.00.
Published each week.

**WHEN WRITING ADVERTISERS
PLEASE MENTION THAT YOU SAW
THEIR ADVERTISEMENT IN THIS PAPER**

HARDWAREMEN AND THE HOLIDAY TRADE.

THE hardware store is not the chief cynosure among business places during the Christmas holiday season, but it could be made a great deal more of one than it is at present without very great effort.

Utilized in a proper manner, there are a great many lines purely appertaining to the hardware trade which could be made to do good service in bringing a larger share of the holiday trade to the retail hardwareman's store. But there are a great many articles which a number of hardwaremen pay practically no attention to which would undoubtedly be helpful to business during the holiday season.

There are athletic goods for indoor use, for instance. These are sensible goods and they are attractive in the window. Then there are lamp goods, hearth sets, fancy

brass goods, and so on, ad infinitum. But it is not our purpose to enumerate. We only aim to set hardwaremen thinking along these lines who have not already begun to do so.

A comparatively small amount of money judiciously expended can be made to produce interesting and profitable results.

Wisdom does not, however, end with the purchasing of stock for the holiday trade. Wise forethought should be exercised in devising ways and means for the sale of the goods.

If there is any time of the year when effective window displays are demanded it is during the Christmas holiday season. The window which is sombre or commonplace is as if it were hidden under a cloud, and people are not given to looking under clouds during Christmas, particularly when it is only a poorly displayed hardwareman's window behind them.

Both the goods a hardwareman carries and the opportunities which the season affords provide any amount of material for a man with ideas to work upon in arranging an attractive window display.

Hardwaremen might find it productive of good results to set their clerks to work devising window displays. And not only window displays, but attractive show cards and advertisements as well. To neglect advertising in the local press would be a great mistake, for a bright advertisement is the finger-board which directs purchasers to the store.

He is a wise hardwareman who not only lays in a stock for his holiday trade, but does some judicious advertising as well.

TOO BUSY TO MAKE COLLECTIONS.

It appears that some hardwaremen in Canada are too busy to look after their collections. At least, that is what some of them assert.

To allow the activity of trade to deter a merchant from making collections is bad business policy.

Money is to the business what food is to the merchant. It sustains life. And therefore it does not matter how brisk business may be, it is a most short-sighted policy, indeed, for a merchant to neglect his collections.

If he does not make his collections he certainly cannot meet his liabilities as they mature, the result of which is injured credit. And then for the retailer to allow those owing him money to imagine that he is in no hurry to be paid is a grave mistake.

The merchant should do everything he can to cultivate prompt payments, and not, through carelessness, do that which will tend to produce contrary results.

It is a good thing for a merchant to once and a while cast an eye upon his competitor, but it is dangerous to keep it there all the time. He may run amuck.

ADVANCE IN WINDOW GLASS.

The window glass jobbers at a meeting held in Montreal this week decided upon a uniform advance in the price of glass.

The change means a rise of 5c. in first and second breaks and 10 to 30c. in third and further breaks. The changes are:

	New.	Old.
First break, per 50 feet.....	\$1 40	\$1 35
Second " "	1 50	1 45
Third break, 41 x 50, per 100 feet ...	3 10	3 00
" 51 x 60, "	3 30	3 00

KEEP COURTING BRITISH TRADE.

A JUST and equitable treaty of reciprocity with the United States would undoubtedly be acceptable. Anything which tends to the reciprocal removal of barriers to trade would naturally be acceptable to people possessed of business common sense.

For coal, lumber, fish, eggs and barley the United States is our most important market, and to have freer access to this market for these particular products is something not to be accounted unworthy of being attained.

But it is better that our relations with the United States should remain ever as they are than that in the obtaining of reciprocity Canadians should be induced to lessen one jot or tittle their solicitude for British trade.

The British market is undoubtedly the market upon which Canadians should concentrate their efforts to possess. We should do this on the ground of business common sense, leaving the matter of sentiment out of the question altogether.

The best market for Canadian products is undoubtedly Great Britain, and it has been consistently so since 1890. This table, giving our exports to Great Britain and the United States respectively, proves it:

	To Great Britain.	To United States.
1889.....	\$38,105,126	\$43,522,404
1890.....	48,353,694	40,522,810
1891.....	49,280,858	41,138,695
1892.....	64,906,549	38,988,027
1893.....	64,080,493	43,923,010
1894.....	68,538,856	35,809,940
1895.....	61,856,990	41,297,676
1896.....	66,690,288	44,448,410
	\$461,812,854	\$329,650,972

It will be observed from this table that from 1889 to 1896 there was an increase of over 74 per cent. in the exports of Canadian produce to Great Britain, and an increase of only 2.35 per cent. in the exports to the United States, while the aggregate trade for the eight years was \$132,161,882 (or 40 per cent.) larger with the Mother Country than with our neighbors to the south.

Canada's chief industry is easily agricultural. Consequently it is the exports in this particular which we are most concerned about. We find that in 1896 of animals and their products we sent \$40,694,222 worth to Great Britain and \$6,173,875 worth to the United States, and in purely agricultural pro-

ducts we exported \$9,551,316 worth to Great Britain and \$3,232,793 worth to the United States. These figures require no comment. They speak for themselves.

The figures quoted above show how unwise it would be for Canada to allow anything to diminish her efforts to build up her export trade with Great Britain. But there are other reasons why she should not rely less upon the British market and more upon the United States market. And chief of these is the uncertainty of the market to the south of us. Not only do we know from experience that the United States Congress is controlled only too often by demagogues who are no respecters of treaties, but we also know that with the advent of one political party is very likely to depart the policy of its predecessor.

In Great Britain, on the other hand, we know the country is ruled by statesmen, and that the trade policy is about as permanent as most things material are.

By all means, let us have a fair and just reciprocity treaty with the United States if we can get it. But whether we get it or not let us as persistently as ever court British trade.

What we have we should hold, and as much more as we can grasp we should get.

MUST PAY THEIR DEBTS.

Mr. Gage, Secretary of the Treasury in President McKinley's Cabinet, has instructed the clerks in his department that they must either pay their debts or lose their situations.

To issue such instructions is one thing and to carry them out is another. Most civil servants have friends in court and out of court who can often make it unpleasant for heads of departments who assay to dismiss subordinates, whether justly or not.

Under party government as it is to-day heads of departments have to spend almost as much time steering a course which will keep them in office as they do in transacting the legitimate business devolving upon them.

If Mr. Gage is taking a new departure he will receive the smiles of the business men in Canada as well as those in his own country, for it will establish a precedent with which they can importune the Dominion and Provincial Governments in Canada to go and do likewise.

A BOARD OF TRADE GONE WRONG.

THE internal troubles which are now convulsing the Toronto Board of Trade are due to the fact that the board essayed to undertake that which was beyond its province.

The Toronto Board of Trade was designed to be what its name implies, namely, an institution for the promotion of the business interests (1) of the city in which it is located, and (2) of the country of which that city forms a part.

Life insurance it had no business to meddle with, and because it did meddle with it the board not only finds itself in dangerous waters, but it is compelled to devote its best energies trying to pilot itself out of these dangerous waters when it should be employed in promoting insolvency legislation and other matters appertaining to the commercial welfare of the country.

For some reason or other the Toronto Board of Trade has been gradually deteriorating, until at present it is little better than a sinecure as far as its work and influence in trade matters are concerned.

Montreal has a board of trade which is doing something both for its own city and for the country, while the work which the St. John, N.B., Board of Trade has accomplished in the way of providing steamship accommodation in order to equip its harbor as a winter port should make all the boards of trade of the country blush.

Unless the Toronto Board of Trade throws aside the weight which is now proving so besetting, it will be flagged in the race.

CHANGES IN IRON PIPE.

ACCORDING to information received in Toronto, the manufacturers have reduced prices in certain sizes of black iron pipe, which has led to a material modification in the jobbing price of sizes running from ½ to 2-inch, the drop ranging from 2½ to 5 per cent.

Alteration in the conditions governing these sizes in the United States was the ruling cause with makers for the change.

The new and old jobbing range on the sizes on which the alterations have been made:

Size.	New price.	Old price.	Decline.
½-inch	\$2 40	\$2 45	05.
¾ "	2 85	2 90	05.
1 "	4 00	4 20	20.
1½ "	5 15	5 35	20.
2 "	6 65	6 90	25.
2 "	9 00	9 35	35.

BRITISH CREDITORS AND CANADA.

WHILE acknowledging the necessity of a Dominion insolvency law for the protection of British manufacturers and merchants doing business with Canada, yet we contend that business men in Great Britain who have lost money on account of failures in Canada have unduly magnified these losses

The losses entailed on Canadian account by British creditors have been probably less than in any other colony or foreign country, commercial importance and population considered.

One thing is certain: more has been lost by them in one year in some of the South American republics and in Australasia than in Canada all told since it became confederated thirty years ago.

Canada has never, during its existence as a Dominion, suffered a financial crisis. We have had dull times, but dull times are not crises.

No country probably ever passed through a more severe financial crisis than did the United States recently. But closely as Canada is in touch with the United States, at no

time was there anything approaching a financial crisis.

Our banks, like a rock, stood unshaken in the storm, to the satisfaction of ourselves and to the admiration of financial men in the United States who have ever since been agitating to a more or less extent for the remodelling of their banking system on the lines of the Canadian.

Some British houses have unfortunately lost rather heavy sums in Canada; but while Canadians have been somewhat to blame for not having a Dominion insolvency law, yet the skirts of the British creditors who have lost money are by no means altogether clear.

Canadians in touch with commercial matters have often been astonished at the indiscreet manner in which credit was accorded in this country to those who were known to be altogether unworthy of it. Only a short time ago we had two failures in Canada which were striking examples of this.

Business common sense demands that the Canadian Parliament pass a Dominion insolvency law. It also demands that British

manufacturers and merchants in Great Britain who are not now doing so shall exercise greater discrimination, and not sell goods to every Tom, Dick and Harry who is willing to place orders with them.

The successful merchant is the up-to-date merchant.

THE WIRE NAIL CONTRACT.

The figures published by some of the daily papers in regard to the price of wire nails at which the contract was secured for the city of Toronto are misleading. The price really to be paid by the corporation is \$1.85, the \$1.70 being the net figure if the kegs are returned in sound condition.

One dollar and eighty-five cents per keg is low enough as it is, but it should be remembered that the contract is for five-inch nails only, and a five-inch nail can be made just as quickly as the one-inch kind, while a keg full of the former can be made much more quickly than is possible with the latter size.

At \$1.85 it is the general opinion that the contractors will have all they can do to come out with a profit.

1898

Iver Johnson Automatic Revolvers

have many points of superiority; chief amongst these is the fact that they

cannot be discharged accidentally.

The only way to discharge one is to **pull the trigger**. Catching the hammer in the clothing, dropping the weapon, or any other such accident does no harm, as the revolver cannot be fired unless the trigger is pulled.

Iver Johnson Cycles

are well and favorably known as staunch and reliable wheels, made of good material, by a house with a reputation for knowing how to make good cycles. Their machines

ARE

known throughout the country as

Honest Cycles at Honest Prices.

SEND FOR CATALOGUES.
WE WANT GOOD AGENTS.

Iver Johnson's Arms and Cycle Works

New York Branch,
99 Chambers Street

. . . . Fitchburg, Mass.

PRICE CUTTING.

ONE of the most common and at the same time serious evils of the retail business of to-day is the custom of selling merchandise at so-called "cut-rate" prices, arising primarily from loss of trade incident to the recent hard times, says Trade. Beginning with the large downtown department stores who adopted the plan to attract trade, and trusted to the tempting display of other articles to lure the bargain-seeker to buy what he did not need, and thereby in a measure offset the cut-rate purchase, it has slowly but surely wormed its way into the smaller stores until to-day the entire retail business of our cities is honeycombed with it, and hardly a corner grocery or meat shop but flaunts its cut-rate announcements in the public eye. The system is certainly a pernicious one and it will require a long period of good times and a good bit of determination on the part of the retailer to overcome it unless some feasible plan of co-operation can be agreed upon. Every merchant is surely entitled to a reasonable profit on all the goods he sells, and the buying public should be perfectly willing to allow it, but an epidemic of bargain, closing out, remnant, removal, going to move, inventory, ready-cash, fire, mortgage, basement bargain, dissolution of partnership, estate closing, take off, catch on and heaven knows what other kind of sales have so educated the average buyer that bargain-hunting has become a fin de siecle mania of alarming proportions.

It is a notorious fact that many of the gigantic retail institutions in the congested districts of our cities no longer hold the regular patronage which formerly made the backbone of all commercial houses, and are now dependent entirely upon the army of bargain-hunters who scan the columns of the daily press for marked-down sales as religiously as the head of the family looks for the news of the day. The natural sequence of such a condition is that many of the most lavish advertisers have adopted a plan of deliberate misrepresentation, but a little if any short of genuine fraud, and the honest merchant who does what he advertises is thereby placed at a most unfair disadvantage in addition to the other evils incident to a "cut rate" policy.

One of the worst features of this course is the fact that it has arisen out of a real need for better values, superinduced by hard times and a consequent reduction of incomes. The practice has a tendency to unsettle trade, make the buyer dissatisfied with the price, be it ever so low, and cut away largely, if not entirely, the profits of conducting business.

Now that times are better and bid fair to

remain so permanently, it would seem as though the opportunity were here for a determined attempt to correct this abuse. We believe that with a steady policy of honest goods at honest values and a gradual abandonment of the credit business, which is in itself an evil of no mean proportions, merchants will find less need for price-cutting than has existed for some time past.

The trite saying of Abraham Lincoln about fooling the people is going to find another practical demonstration in the gradual return to better and more discriminating methods on the part of the buyer, and the opportunity will present itself to enable the merchant to command at least a decent profit on his sales. Taken all in all, on the average you get what you pay for, and the old saw "good horse, good money" is beginning to reveal itself to the chronic bargain-seeker as never before. Let us hope it is the dawn of a better era for the merchant.

PIG IRON PRODUCING COUNTRIES.

Iron and Coal Trades Review: Another remarkable feature of the world's make of pig iron is the decreasing proportion of the whole contributed in recent years by Great Britain. In 1871 this country supplied 53.2 per cent. of the world's output and all other countries only 46.8 per cent. Ten years later Great Britain had fallen to 42.3 per cent. of the total, and other countries had risen to 57.7 per cent. To-day Great Britain only contributes 29 per cent. of the world's make, and other countries furnish about 70 per cent. The following table gives the production of each country and its percentage proportion of the total in the year 1896:

	Make of pig iron. 1 = 1,000 tons.	Percentage proportion of total.
Great Britain	8,659	29.3
United States	8,623	29.2
Germany	5,186	18.6
France	2,334	7.9
Belgium	933	3.1
Austria-Hungary	1,103	3.7
Russia	1,000	3.3
Sweden	950	3.2
Spain	246	.8
Canada	60	.2
Italy	40	.1
Other countries	50	.1
Total	29,484	95.12

RIDDLE-MY-RE.

Appended to a tablet commemorating the erection of Abingdon Bridge in the "fourth yere of King Harry the fyfth" is the following quaint advertisement:

Take the first letter of youre fowre fader with the worker of wex, and I and N, the colere of an asse; set them togeder, and tell me yf you can what it is than. Richard Faunonde, iremonger, hath made this tabul, and set it here in the year of Kyng Henry the sixte xxvith [1458].

The missing-word advertisement is not in it with this. I wonder how many people guessed the riddle correctly. The tablet is to be seen in the hall of Christ's Hospital. —Ironmonger.

HOLDING SNOW ON ROOFS.

Quite a practical idea is claimed by Martin Clason, of Providence, to be realized in his recent invention for holding snow on roofs, says an exchange. It is represented that when a bent sheet metal strip is used partly melted snow is liable to freeze, and when it melts ice lumps often fall from the roof. The proposed guard mechanism in this case is bent up from a length of wire, one end of which is pointed and bent at a sharp angle to form a spike, by which the guard is secured in the sheathing; the wire extends to the guard proper, where it is bent upward to form a central rod, at the upper end of which it is bent into practically a circular loop, the lower part of this resting in the bend of the wire, where it forms the central rod; the wire is again sharply bent so that a part extends downward behind the central rod, and it is now sharply bent under the loop, the other end of the wire extending forward to form the bearing end—the under side of this being cut away on a slant, so that, while forming a firm bearing, the end will not bear on and injure the slate of the roof. While this arrangement forms a sufficient guard to hold the snow from sliding on the steep roof, it is claimed to have the advantage, so very desirable, to obviate the banking up of snow or ice on the guard, as it does not prevent the free contact of the air.

WHY THE MEN GREW TIRED.

A point of some interest to those engaged in certain industrial pursuits is mentioned in The Woodworker. A San Francisco manufacturer noticed a great difference in the apparent activity of two sets of men working on similar jobs at the vise in two rooms of a large shop, one being in an old building and the other in one of recent construction. In the former room the men stood easily and naturally at their work, and showed no symptoms of a hankering after a seat on the bench, while in the latter the men were shifting their weight from one foot to the other, throwing one leg upon the bench upon every opportunity and showing every evidence of foot fatigue. The superintendent guessed that the difference was due to the floors upon which the two men were standing. In the old shop the floor was of wood, springy to a certain extent, and a poor conductor of heat; in the new shop it was of superior concrete, an excellent conductor of heat from the foot of the workman and perfectly unyielding. So the benches in the new shop were raised a couple of inches, and each man received a platform of wood that rested on two cross pieces at the end and had a light spring to it. The foot weariness disappeared almost at once and no further trouble was experienced.

A CHEAP STOVE.

THERE is a most ingenious young woman in the domestic science department of Pratt Institute, Brooklyn, says The New York Times, and she has a most ingenious cooking apparatus. Miss Alberta Thomas is the young woman, and her stove is in the nature of an Aladdin oven, one difference being that, while the regular stove costs some \$35, hers costs \$5, and it will do everything she desires it to do in the most satisfactory manner.

"And I could have made it myself," she says, "for I have taken lessons in manual training, and then it would have cost much less. I am almost sorry I did not. A housekeeper could improvise the whole thing with boxes from the grocer's." The Aladdin oven is well known as a slow cooking apparatus, which will cook food deliciously without the supervision of the cook, and without giving out heat and at very little expense, by means of an oil lamp.

Miss Thomas' oven is constructed upon the same principle, and she is experimenting with it, to see at how little cost and inconvenience a student could board herself. She is experimenting with various menus for breakfast, luncheon and dinner, which will be appetizing, contain the necessary amount of nutrition and give the student but little trouble to prepare, and which can be supplied at the rate of 21c. a day or \$1.50 a week. The experiment is progressing most satisfactorily. The oven, to begin at the beginning, is a model in its way, and one of the show pieces in the domestic science department of the institute.

It is made of a box of some ordinary wood, in the shape of a cube, 16 inches square or thereabout. On the outside it is covered with a pretty piece of carpet of a no-pattern, all-over design. The inside is lined with zinc. The whole front of the box is a door on hinges, which fastens at one side with a hook.

The bottom of this box is cut out, leaving a margin of perhaps 2 inches. There is a similar opening in the top of a little square, unfinished table upon which it stands. There are four nicely turned legs on the table, and at the bottom, about one or two inches from the floor, a movable shelf, upon which stands a plain Rochester lamp, which, it may be said in the interest of economical students, costs 90 cents. The shelf is made movable, so that if desired a larger lamp may be used and set on the floor under the table. Inside the box and just large enough to go in comfortably and cover the opening in the bottom of the box where it is over the blaze of the lamp is a little tin oven with a grate inside. This is a regular oven which might come from any small gas or oil stove.

YOU CAN DO THE SAME

In a letter received last week from Jas. S. Greenhill, Leamington, agent for **S.-W. P.**, he made the following remarks:

"I don't see any more immediate orders at present, but I must say your paint has been very satisfactory this season. **I have sold over three times the quantity I did last year.**"

That's our claim exactly—that any wide-awake paint dealer can largely increase his paint trade by handling

THE SHERWIN-WILLIAMS PAINTS

We'll venture to say Mr. Greenhill will increase his trade even more this year than last. Where **S.-W. P.** is best known it sells most.

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL
BOSTON

All around it in the zinc-lined box there is room for the hot air to circulate. This completes the apparatus when the chimney is mentioned, a roll of zinc, perhaps 1½ inches in diameter, which is inserted into a round hole at the top of the box.

CALGARY AND KLONDIKE.

The number of Klondikers in Calgary, N.W.T., is said to be surprising. There are two separate parties of Englishmen of twelve each under the leadership of Capt. O'Brien and Mr. Clatworthy respectively. Still another English party, consisting of five men under Capt. Bernard. Then there is a fourth party from Illinois. These men are all taking upwards of twelve months' provisions, besides ammunition, mining tools and gold testing instruments. They will all proceed overland in a few days. They have provided themselves with an adequate supply of horses, husky dogs, sleeping bags and tents and experienced cooks, and should travel prove impossible at any stage of the route, through excessive snow or frost or accident, they can at least form a merry camping party till winter breaks. Many of the parties are already accustomed to Arctic travel.

The parties have outfitted at London, Eng., Montreal, Winnipeg and Calgary.

INCREASED PRODUCTIVITY OF BLAST FURNACES.

The increase of average productivity per furnace is one of the most interesting phases of the development of the British iron industry. The British average is still behind the average of Germany, Belgium and the United States, but it is improving all the time, although latterly somewhat slowly. Still, there is much change to be noted, if we carry our retrospect back to the earlier half of the century; and, if we have not made the same rate of progress as in some other countries, the character of our conditions has something to answer for. Our present average is 443 tons per furnace per week; but in Scotland, and one or two other districts where raw coal is used, it is practically impossible to reach that figure. The following table shows the gradual progress made up to 1852, against last year's output:

AVERAGE OUTPUT OF PIG IRON PER FURNACE PER WEEK, 1806 TO 1896.		
Year.	Production 1—1,000 tons.	Average make per furnace per week.
1806	258	30
1823	458	34
1830	698	50
1839	1,243	64
1847	1,999	90
1852	2,701	123
1896	8,659	443



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

SMILES IN HARDWARE.

I HAVE to thank several correspondents—both ironmongers and assistants—for some items they have sent illustrating the humorous side of the trade. I am always pleased to hear from such. It gives me and others whose lives are of a somewhat prosaic character a chance to join in the laugh, and the correspondent who sends the story need laugh none the less. Here is a tit-bit sent me by an Australian correspondent:

A lady and her three-year-old daughter were in the shop the other day, when the little one espied a galvanized iron washing trough, with a partition across the centre of it, standing on the floor near by. After gazing in wonderment at the trough for a little while, she said: "That's a funny bath, isn't it, mamma? Is it for twins?"

It reminds me of a joke I saw somewhere the other day. The incident happened a month or two back at an establishment where they make a strong line of perambulators, mail carts and other baby carriages. An Irishwoman, whom we will put down as Mrs. Murphy, came in, when the following little dialogue ensued:

Assistant: "You want some conveyance for your children, madam? A mail cart, I presume?"
Mrs. Murphy: "Well, sorr, Oi want a sort of a half male and half faymale cart. Yez see, its twins Oi've got; an' wan's a boy an' the other's a girl!"

It is, however, not always the customer who is the cause of a smile. Perpend:

An eminent firm of photographic dry-plate manufacturers has issued a batch of plates in boxes, the lids of which bear the legend: "Notice: This box not to be opened until the instructions inside have been read."

Sometimes an assistant gets a chance of scoring off an eccentric customer which he could not miss even if "the sack" followed. Here is an instance:

"Paint, Thomas," said a moralizing old gentleman the other day when buying a pound tin of "ready mixed," "is a great hider of weak spots. It covers the rust, evens up the rough places, fills the cracks and knot holes, makes the old look new, and hides the blemishes from the human eye. In selling stuff like this, Thomas, you are a deceiver, and yet a necessary evil." "Yes, sir," said Thomas slowly, "you don't want any to go over your character, do you?"

This practice, however, of turning upon a

customer and giving him back his own is not always to be commended. Discretion is often the better part of valor. I have in my pigeon holes quite an array of queer orders which have been received by assistants and principals, but these demand another paragraph.

AIR SHIP FOR THE KLONDIKE.

Hiram S. Maxim, who holds the office of superintendent of construction of the Atlantic & Pacific Aerial Navigation Co., announces that the company have in course of construction an air ship which is expected to make a trip to the Klondike region next spring. Mr. Maxim describes the apparatus as follows: "When everything necessary is on board the ship will weigh 5,000 pounds, and we shall take on board about one ton weight of passengers and provisions. The space occupied will be 106,000 cubic feet. The propelling power will be a 16-horse-power naphtha engine, which will be made out of aluminum as far as that metal can be used, and will weigh, complete, 900 pounds. The gasoline will be stored in tanks in the cases, which will contain a sufficient quantity to drive the vessel round the earth without replenishing the tanks. The skin of the ship will be double and the intermediate space will be filled with hydrogen gas. This gas will be confined in separate compartments and will be in the upper part of the cylinder and in the cones."

GERMAN FAUCETS.

It appears as if the trade has been considerably mixed up on the numbers of faucets, as lately some importers have undersized Boker numbers, which are accepted in this market as the standard. It is therefore advisable if all buyers of this class of goods could compare these faucets with those stamped "Boker" in order to see that they get the proper value for the respective numbers. The size of the plug or handle has also been considerably reduced on these imitations; in fact, this new line is very inferior in every respect.

COAST RAILWAY CONSTRUCTION.

Dr. Murphy, provincial engineer, made a final inspection trip this week over the 31 miles in operation between Yarmouth and East Pubnico, and, we understand, was much pleased with the fine condition of the road. We believe the physical condition of this road to be equal to any in Canada. There are no wooden structures; all bridges are of steel, and the masonry is first-class in every structure. The buildings, rolling stock, etc., are all of the best, and the train service is most satisfactory to the public. The station at Central Argyle has been moved west about 200 yards to a point where a good road has been built in from the main highway. This will be a great convenience to the residents of this district, and the company deserves credit for meeting the views of the people in this respect. Construction work has been interfered with somewhat by bad weather the past ten days, but grading is nearly completed to Lower East Pubnico and all culverts are completed to Upper Woods Harbor.—Yarmouth Telegram.

WATER POWER IN SOUTH AMERICA.

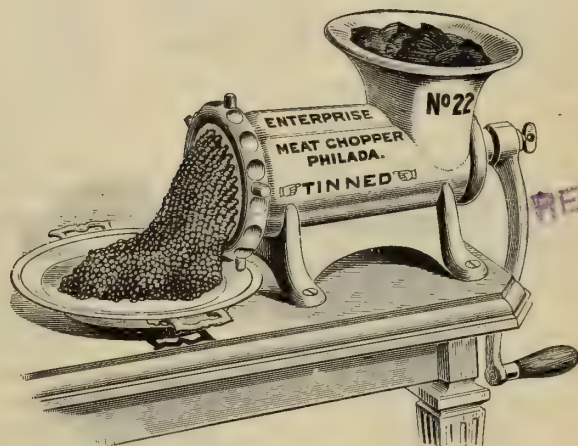
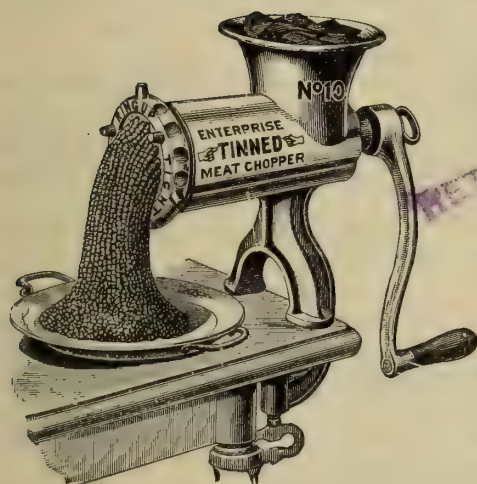
Marked progress is being made in Central and South America with water power for the generation of electricity, according to an exchange. Coal is scarce and dear, but water is cheap and plenty. In Mexico the Pueblo Lighting Co. transmits 965 horse-power nine miles into the city; at Pachuca 3,300 horse-power is sent sixteen miles; the San Rafael Paper Mills have 750 horse-power; the Mazipal Copper Co., of Concepcion del Oro, has a 400 horse-power plant; an 800-horse-power plant is to convey power eight miles for the Jalapa Light Co., and San Miguel and Chihuahua are supplied in like manner. In Argentina, 5,000 horse-power is conveyed sixteen miles to Cordova; at Lima, Peru, 150 horse-power is sent five miles; and Escuintla, Guatemala; San Salvador, Salvador; San Christobal, Venezuela, and San Gil, Columbia, are all supplied with electricity by water power.

H. S. HOWLAND, SONS & CO.

WHOLESALE
ONLY

37 West
Front Street ... Toronto

Meat Cutters



ENTERPRISE, "Tinned,"

Nos. 5, 10, 12, 22, 32.

GERMAN, "Porcelain Lined,"

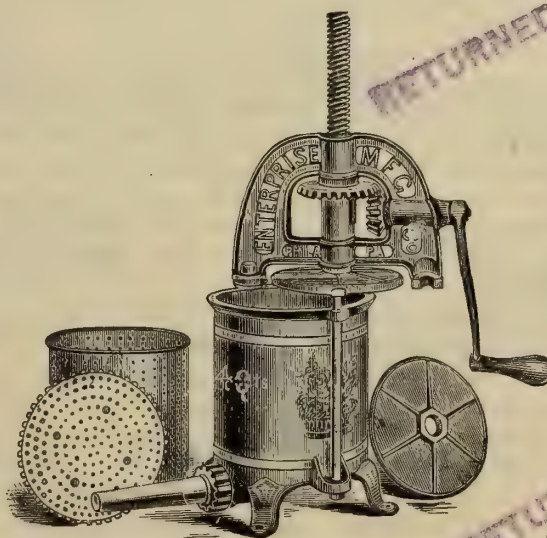
Nos. 5, 10, 12, 22, 32.

ALSO ALL PARTS FOR SAME.



Raisin
Seeders

X Ray
and
Enterprise



Enterprise
Stuffers

No. 15—2 Qts.
No. 25—4 Qts.
No. 35—8 Qts.

We Ship Promptly.

GRAHAM Wire and Cut Nails are the Best.

Our Prices are Right.

H. S. HOWLAND, SONS & CO. - TORONTO

PATENT REPORT.

(Special for HARDWARE AND METAL.)

THE following list of recently expired patents and trade marks, of interest to our patrons, is published by Marion & Marion, solicitors of patents and experts, head office, 185 St. James street, Temple Building, Montreal. A copy of any of these may be had of the above firm for 10c. each:

- No. 233,684—Laurin L. King, Chicago, Ill., water closet.
 No. 233,893—Josiah C. Stevens, Cambridgeport, Mass., pipe and nut wrench.
 No. 233,972—Dennis Brady, New Orleans, La., rain water cut-off.
 No. 234,086—Benjamin L. Stowe et al, New York, mechanism for detecting waste of water from pipes.
 No. 334,091—Henry A. Thompson, Farmington, Me., wrench.
 No. 234,114—James E. Boyle, Brooklyn, service box.
 No. 234,131—Andrew Klair et al, Baltimore, faucet.
 No. 234,287—George Jennings et al, Stangate, England, waste water guard for water closets.
 No. 234,288—George Jennings et al, Stangate, England, water closets.
 No. 234,304—Charles H. Lovrein et al, Erie, Pa., pipe tongs.

TRADE MARKS.

- No. 30,780—Standard Manufacturing Co., Allegheny, Pa., essential feature: the word "Perfecto." Used since Oct. 1, 1895.
 No. 592,810—Richard R. Mitchell, Montreal, Canada, flushing valve.
 No. 592,814—Andrew McCann, Chicago, Ill., check valve for sewers.
 No. 592,820—John F. Normoyle et al, New York, pipe coupling.
 No. 593,008—John Beermaker et al, Wahoo, Neb., pipe wrench.
 No. 593,025—John T. Morrison, Minneapolis, Minn., water closet repair.
 No. 593,042—Amos T. Birtch, Ceryl, Neb., gas pipe and rod tongs.
 No. 593,049—Lawrence Williams, Columbus City, Iowa, pipe wrench.

A NOVEL WINDOW DISPLAY.

The last issue of the Clinton (Ia.) Advertiser contains the following description of a locomotive and tender constructed for a show window advertisement by Chris. Magnussen, hardware merchant of that city, out of different articles of hardware: "The boiler of the engine is a 10-gallon milk can with smoke stack of tin cups and cans. The coal box is a baking pan of huge dimensions, surmounted by a lunch box representing the cab. The drivers are well wheels, while the truck wheels are taken from a hay carrier. The cylinder is supplied by a two-quart milk can, with piston rods and cranks made with two-foot rules. The cow catcher is shown by an ingenious arrangement of basting spoons. Following the engine is the tender represented by a bread box set on a truck of hay wheels. The whole representation is uniform in size, and at first glance appears to be a real locomotive in miniature. In the rear of the engine, as though it had just been passed, stands a towering structure made from cartridge boxes, bearing the inscription "Depot of Old City of Lyons." Through the archway of the depot is seen a body of

water, representing the Mississippi, upon which is seen floating a row boat, occupied by a native of the old city. Mr. Magnussen has exhibited much ingenuity in constructing this window scene, and is receiving many compliments."

THE N. W. TRAVELERS.

In response to Secretary O'Loughlin's call for a meeting, there was a large attendance of members of the Northwest Commercial Travelers' Association in the Board of Trade rooms, Winnipeg, on Saturday week. Mr. A. L. Johnston, the retiring president, occupied the chair. The meeting was held for the election of officers for the ensuing year, and the result was as follows:

President—J. C. Mundie.
 First Vice-President—F. W. Drewry.
 Second Vice-President—W. Hargreaves.
 Treasurer—L. C. McIntyre.
 Directors—A. L. Johnston, A. P. Jeffrey, F. J. C. Cox, Horace Wilson, C. R. Steele, Kenneth McKenzie, G. F. Bryan, R. M. McGowan, J. T. Persse.

All the officers and directors were elected by acclamation.

The most interesting matter which was discussed was the annual entertainment. It was decided to hold a conversazione on Monday, Dec. 27, at the Hotel Manitoba.

NOVA SCOTIA CROPS.

The Secretary of Agriculture has just completed his report on the 1897 crops in Nova Scotia. The continuous wet and cold weather during April, May and part of June retarded seeding and planting, and had generally a very injurious effect. In some instances where potatoes were planted early the seed rotted in the ground owing to the excessive rains, and a second planting had to be done.

The hay crop turned out much better than might have been expected, even beating the exceptionally fine crop of 1896. The condition of live stock in all parts of the province is reported above the average. The oat crop fell considerably below the average, being only 81 per cent. against 111 the previous year. Wheat and other grain suffered from the unfavorable weather, and in every case fell below the average of the previous year.

STEEL HORSE COLLARS.

Among the new uses to which steel is being adapted, the latest novelty is a steel horse collar, according to an English newspaper. It is intended chiefly for use in mines and other underground workings where horses are employed. Its principal features are that it is elastic, and therefore adjustable to horses of various sizes. It is complete in itself, without hames, and while easy to wear it is specially strong and low at the top to prevent contact with the roof of the mine. A company has been formed to produce the new collar.

MAXIMS BY HARDWAREMEN.

EACH of these groups of maxims is contributed by a merchant as embodying the results of his observation and experience.

XXXIII.

Buy as much as possible for cash, as you will get in most cases lower prices.

Avoid incurring debts as far as practical, as they will fetter your freedom of action.

Do not trust any important duty to others, if it is possible for you to do it yourself.

Acquire the habit of patience and politeness.

Do not buy goods merely because they are cheap.

Try to be as just to your customers and employes as you would like them to be to yourself.

Take time by the forelock and lead your trade rather than to follow beaten tracks.

Remember always that a satisfied customer is the best advertisement you can get.

Do not stint printer's ink, but advertise freely and wisely.

Do not commit the mistake of keeping only goods which you think the best, but follow the demand of your customers, as it is them you have to please and not yourself.

Learn to say no, not in a boorish way, but firmly and politely.

Do not desire to get rich all at once. Success will come if you work for it in the right way and by the right means.

XXXIV.

Trust not your business to others unless unable to look after it yourself.

Be careful in your accounts, as frequent errors lose customers or cash.

Honesty, industry and punctuality constitute three prime essentials of a business life.

Think not that you might have been more successful in other business because others are doing better than you. Study the elements of their success and profit by them.

Buy for cash; but if your capital is such that you cannot do so, then so study your trade and buy that your receipts will meet bills when due.

It is better to have goods on the shelf than to have bad accounts.

Allow yourself some leisure, as rest in return will bring different thoughts, more energy and greater zeal.

Be courteous and polite. Ill-treat not the illiterate, nor ignore the poor, for their earnings constitute the greater part of your income.

Read and study your trade journals, as success comes not through ignorance.—Iron Age.

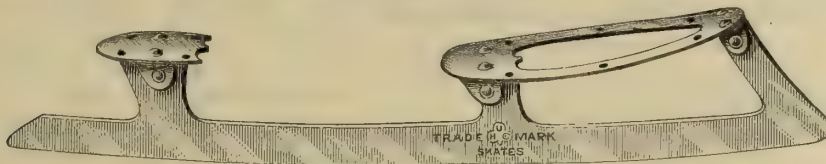
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



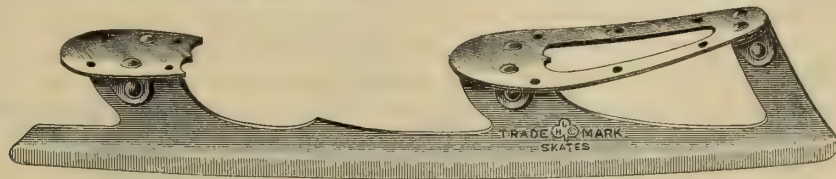
Plain Runner, Straight.



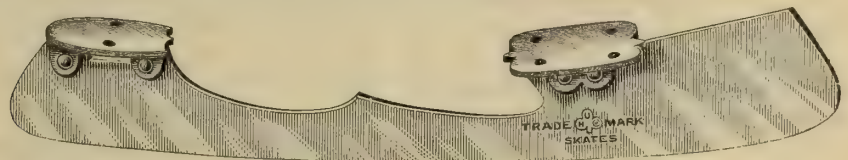
Plain Runner, Curved Blade.



Ribbed Runner.

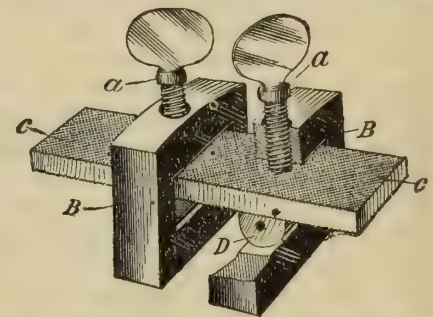


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY

THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.

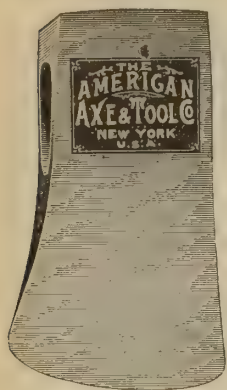
Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street

— TORRINGTON, CONN., U.S.A.



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No. 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

DIAMOND MATCH CO. AND E. B. EDDY AMALGAMATE.

WHEN a representative of **HARDWARE AND METAL** was at Hull the other day he noticed a more than usual bustle, if possible, about the Eddy Co.'s works, and after looking over their new and complete system of electric sidings for quicker loading and delivery of freight to the railways running into Hull and Ottawa, found new plans and specifications being made looking to the remodelling of their match plant, and learned from Mr. Eddy that, with his usual determination to always keep abreast of, and, with his inclination to be sometimes a little ahead of, the times in match making, he had just returned from a trip west, where he has been by special appointment to meet the president and directors of the Diamond Match Co., and consummated a deal between these two large companies, the result of which will be the immediate building of a large extension to the E. B. Eddy Co.'s match factory, the remodelling of the whole plant and machinery of that department and the placing of the most modern and exclusive match machinery in the world in early operation in Canada.

This will create a complete revolution in match making in Canada, and next spring will see the new equipment turning out not only all of Eddy's well-known brands, but also a lot of new styles, makes and brands of matches for the home and general trade. Mr. Eddy has for nearly fifty years held with a bold and determined hand the supremacy of the Canadian match trade, and although the Eddy Co. has always been in very good shape all round to meet competition, Mr. Eddy now says that he is in a position to defy competition from anywhere, at home or abroad, whether English, French, German, American, Japanese, Swedish, or what not.

With the ceaseless power of the Chaudiere Falls at their back, with the arrangements just completed with the Diamond Match

Co., with the splendid trade connection in Canada, in the United States and in Europe, there is no telling where the limit of the sales and operations of this great company in the match business will end.

U. S. PIG IRON IN THE BLACK COUNTRY.

Some little consternation has been excited among the pig iron makers of South Staffordshire, by the fact that finished ironmakers are using, in rather considerable quantity, pig iron smelted in Alabama and Pittsburg—500 miles from the seaboard—and delivered free in Liverpool at 37s. 6d. per ton. When to this price is added the cost of railway or canal freightage from Liverpool to Wolverhampton, the result is that pig iron can be delivered into the mills and forges of South Staffordshire at 5s. to 7s. 6d. per ton lower than pigs of corresponding quality can be produced either on the spot or in the adjacent districts. This is a fact of itself "sufficiently serious," but what it may lead up to remains to be seen. There is no doubt that prices of pig iron in South Staffordshire have for some time been out of all proportion to those for finished iron, but it is hardly to be expected that the local smelters can make such a reduction in their prices as to meet the American competition if they are to have any profit at all.—*Hardware-man.*

AN ENGLISH FIRM'S OFFER.

Thomas Hemming & Son, Limited, Redditch, England, long ago made a name for themselves as manufacturers of the finest needles, fish-hooks and tackle, and for years have been winners of the leading prizes at the big exhibitions. Their make is known to many in Canada, but under the preferential tariff they intend doing more in the Dominion. In order to place their samples before the trade they will send a package free to any firm enclosing their business card or letter heading and mentioning this paper.—*Dry Goods Review.*

ENCOURAGE CANADIAN PORTS.

WHEN Mr. W. S. Fisher, president of the St. John, N.B., Board of Trade, was making his tour through western Ontario there was one thing he endeavored to impress upon importers, and that was that they should instruct people from whom they were purchasing goods abroad to ship goods by all Canadian route when rates were as low, or lower, than by any other route.

There is nothing unreasonable in this request. No appeal is made to patriotism. The request is simply based on business. Importers are only asked to have their goods shipped by an all Canadian route when the freight rates are equal to those of any other route.

Business is business. And in these days, when patriotism has often to give way to business, little fruit would be expected from an appeal like this based purely on national sentiment. We by no means claim this is right. We are speaking of things as they are, not what they should be. But Mr. Fisher's request does not conflict with the business sentiment, and there should therefore be enough of patriotism in the business men of this country to comply with his request when the conditions which he sets forth obtain.

HARDWARE AND METAL is pleased to know that some firms are already complying. One firm, James Turner & Co., of Hamilton, have had slips printed to be pasted on the bottom of their orders, instructing their shippers along the lines suggested by Mr. Fisher. The following is a copy of the slip:

PLEASE SHIP ALL GOODS FOR US BY
THE *All Canadian Route* IF RATES
AND DESPATCH EQUAL.

JAMES TURNER & CO.

James Turner & Co. are to be commended for their promptness, and it is to be hoped the example they have set will be followed by others.

Case Carvers

Butler's
Dickinson's
Ellin's

Special values in Celluloid Knives only, Stag Carvers, and all lines of Table Cutlery. In addition to standard makers, JOS. RODGERS, GEO. BUTLER, etc., we have on hand full stock of our own brands

NON XLL, MAPLE LEAF AND W. H. MORLEY & SON.

M. & L. Samuel, Benjamin & Co.

ENGLISH HOUSE.

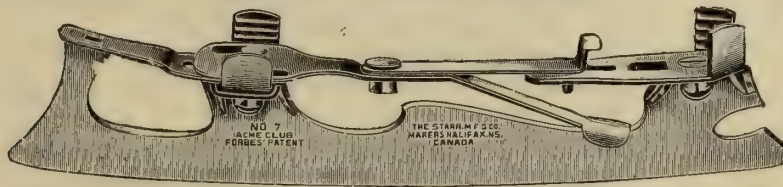
Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

The Genuine Acme

"GENUINE ACME SKATES."



*Returned
Feb. 9/98
to Montreal office
T.A.D.*

No. 7.

Is the designating number on all of the best quality unplated and No. 10 on the highest grade of Nickel plated—both of which have welded and tempered blades.

Our Own Special Quality.

The TRADE MARK "**ACME**" is stamped ONLY on skates of our manufacture.

The STARR MANUFACTURING CO., Limited

T. L. PATON, Resident Agent
MONTREAL.

Beware of worthless
imitations.

Dartmouth, Nova Scotia

TRADE CHAT.

THE Department of Customs has issued a circular to collectors of Customs notifying them that a declaration has been substituted for the oath to be made in Canada on the entry for export of articles not liable to any export duty, and other than are exported under Customs or excise bond.

Mr. J. Givlin, Seaforth, has taken out a patent for a new mop.

Harry Kington, blacksmith, Tilsonburg, has been granted a patent on a weather strip.

The Raymond Manufacturing Co., of Guelph, made a shipment of their machines to Belgium the other day.

H. H. Dryden, hardware merchant, Sussex, N.B., is further improving his handsome store by putting permanent glass cases in the show windows.

A new gold find at Upper Glencoe, Inverness County, N.S., has been reported, and 560 areas have been taken up by Halifax and other parties.

New Glasgow (N.S.) Chronicle: It is a number of years since there was such activity in the local coal trade. The rush is so great at times that orders cannot be filled when wanted.

A fire in Weir & Sons' machine shop, Moncton, N.B., did damage estimated at \$4,000. All the patterns were destroyed, but the machinery suffered only slight loss. Insurance, \$4,000.

The Truro Sun is pleased to hear that some of the citizens of Londonderry are possessed of information which leads them to believe that a company will be formed in the near future to operate the Acadia iron mines and works.

Business Man—"I thought I'd surprise my clerks by getting down to the office at the opening hour."

Customer—"And did you?"

Business Man—"No; there wasn't one of them there."

Seattle merchants are making a strong bid for Klondike trade. A pamphlet has recently been issued containing advertisements of Seattle merchants of all kinds of supplies for the Yukon country. This is being extensively circulated in the east.

The recent issue of \$13,000 Fort William debentures, being at 4½ per cent., and running twenty years, realized \$600 premium. This speaks well for the increasing credit of Fort William in the money markets of Canada, as previous issues have been sold at 98.—Winnipeg Free Press.

The Lake Superior & North Shore Transportation Co. is the name that has been

decided on for a new steamboat company that is organizing to operate a line of boats between Duluth and Port Arthur and intermediate points next season. The capital of the company will be \$50,000, divided in shares of a par value of \$25 each.

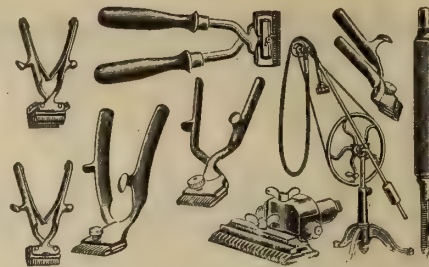
The \$6,000 bankrupt stock of the estate of L. Nadleman, Steveston, B.C., has been purchased by J. G. Hutchinson, who, besides conducting a general store at the latter place, is also president of the British Columbia Supply Co., Limited, Vancouver. The stock consists of groceries, hardware, tinware, dry goods, crockery, etc., and Mr. Hutchinson is disposing of it at Steveston.

Application will be made to Parliament at its next session for an Act to incorporate a company to mine, crush and smelt gold and other minerals in Canada, with power to enter into agreements with the Government of Canada to conduct mining operations upon alternate or other mining locations, the property of the Crown, for the joint account of the Government and the company.

Five years ago a man named Voigt stole a ride on a railroad in Colorado. Recently he became a Christian, and was smitten with remorse to such an extent that he sent a written confession to the company, inclosing \$1.56, being his fare at the rate of three cents a mile, with interest added. As a matter of fact, the fare at that time was 4c. a mile, and the company has sent the man a demand for 52c. in addition.—N.Y. Tribune.

It is coming to be recognized that skill is more to be feared in competition than cheap labor. The other day a cotton manufacturer said Great Britain's chief competitor was the United States, where wages are high; now it is said the English iron trade has most to fear from the same source. An Ontario manufacturer says it pays to make his goods in Canada because his workmen here do half as much again as those he is able to hire in England. Skill counts for more than muscle. —Herald, Montreal, Dec. 6.

A scheme is being perfected towards giving the citizens of St. Thomas cheap commercial electric light. The plan is to ask the Council for an appropriation of from \$20,000 to \$30,000 for an electric plant, place it in the waterworks building and let the city run it. The idea is strongly supported by a large number of property owners, and the chances are that it will meet with considerable favor among the ratepayers. A petition is now going the rounds for presentation to the Council, asking the members to submit a bylaw for such purpose, and the prospects are that it will be largely signed and ultimately carried.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **THE COATES CLIPPER MFG CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.

PERSONS addressing advertisers will kindly mention having seen their advertisement in Canadian Hardware and Metal Merchant.

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL
Montreal or Toronto

ESTABLISHED 1860.

INCORPORATED 1895.



Steel Enamelled Teapots

"STAR"

Pale blue enamel, fancy decorated, with nickel plated covers. Just the thing for your Xmas trade. Made in all sizes. Send for sample and prices.

THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

THE SALARIES OF CLERKS.

A CASE of theft has been reported in one of the stores of Boston, says The Herald, in which a clerk took property from his employers of the value of some thousands of dollars. The crime was deliberate, and appeared to have been systematically continued for some time. On a closer examination of the circumstances, it is developed that this clerk held an important position, that he had been in the store for four years, and that at the end of that period he was receiving but \$6 a week as his salary. The question may be asked if, in view of this, it would not have been policy as well as justice on the part of the employers to have paid him more money. Certainly it would have been prudent in them to know how this clerk was living. An enquiry might easily have satisfied them that what they were paying him was not adequate to his support. This and other instances that have been made public, and probably more which have not been brought to light, indicate that compensation is less than it should be in some departments of business in Boston. It arises, doubtless, from the competition to obtain positions in stores where the work is lighter and more "genteel," as a phrase is, than in mechanical pursuits; but it strikes us as a mistaken policy in more than one aspect. It is apt to induce a feel-

ing of injustice in the minds of those who receive but a pittance for their service and to render them more open to the temptation to dishonesty. On the account of their clerks, as well as in their own interest, those in whose employ they are should know to a reasonable extent the amount of money their clerks are spending.

UTILIZATION OF TIN PLATE SCRAP.

Dr. A. Harpf, according to an exchange, states that numerous patents have been taken out to utilize tin plate scrap, all of which are based upon processes to separate the tin from the iron or steel. The tin is either rubbed off mechanically, sweated off by heating, treated chemically by dissolving in caustic soda with the addition of oxidizing agents, or dissolved in acids direct and separated afterwards. Finally we have electrolytic methods for the recovery of the tin. All of these methods, according to the author, do not seem to prevent large amounts of tin plate scrap going to waste. He therefore proposes to utilize this material in the lead smelter in place of the scrap iron now added. The tin melting first would be acted upon by the sulphide of lead, finally coming down in a tin-lead antimony alloy, which has its uses direct in the arts. Care would have to be taken to keep out all galvanized iron, for zinc would take away

the silver, and is a nuisance anyhow. The whole matter would become a question of freights, for there is no technical objection to the use of the metal in this way.

EARNINGS IN CARIBOO.

Those who intend to pursue their visions of wealth in the Yukon will be interested in the fact that while the Cariboo district, some parts of which were equally as rich as Yukon, yielded \$38,166,970 between 1858 and 1875, and the average number of miners employed yearly was 3,220, the average earnings per man per year were only \$658, remarks an exchange. At Yale, the head of navigation on the Fraser river, provisions were higher than they now are at Dawson City, eggs having sold for as much as \$1 each.

There are several men now living in Manitoba who joined in the rush to Cariboo. They are not among those who talk of going to Yukon.

"CASH" AS A MOTTO.

The retailer who wants to succeed should adopt as his motto "I buy and sell for cash only," remarks an exchange. If this is done you either have the goods on the shelves or the money in the bank, instead of on your books. A dealer who is known as a cash buyer and can handle reasonable quantities, can get prices that the credit buyers never hear of.

THE JOHN BOWMAN HARDWARE & COAL CO.

LONDON, ONTARIO

Will open in a few days with a new stock of HARDWARE.

**No Ancient Goods at
Ancient Prices**

The travellers previously associated with Mr. Bowman will have the pleasure of calling on their old friends in a few days. . . .

KINDLY RESERVE ORDERS.

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Dec. 10, 1897.

HARDWARE.

THERE has been little change in the general hardware situation during the past week. Business in wire, wire nails, cut nails, and other small goods generally, runs quieter. Values as a rule are steady, and there has been an advance in manilla rope here, but sisal is unchanged. Cutlery, skates, and winter specialties of all sorts have been in good request, but are now moving in some what diminished volume compared with last year.

BARB WIRE—Business quiet and values purely nominal.

PLAIN WIRE—There is little doing in plain wire, only a few orders for hay baling being noted. Discounts are 30 and 10 with delivery as before.

WIRE NAILS—There is practically nothing doing in wire nails, unless a few hand-to-mouth orders are considered. Prices are unchanged on the basis of \$1.90 f.o.b. Montreal.

CUT NAILS—The same remarks apply to these, business being almost nil. Base price is unchanged at \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—Business is quiet and prices steady, discounts being 50 per cent.

HORSESHOES—Only a few orders have been received this week. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—Trade continues quiet. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Almost motionless, with discounts 12½ per cent.

BOLTS—There is little change to report, very few orders coming to hand this week. Discounts are: Carriage bolts, ¼ to 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS—Business in these runs very quiet also, with no changes to mention. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at

50, 10 and 5, and washers, 50 to 50 and 10 per cent.

FILES—As last reported. We quote as follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—There has been an advance in the price of manilla here, but sisal is unchanged. Trade is very quiet. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16, 7¼c.; ¾, 7¾c.; 5-16 and ¼, 8¼c., and 3-16, 8¾c.; lath yarn, 6c.

CLOTHES WRINGERS—Dull and unchanged, Royal Canadian being quoted at \$29.

SPADES AND SHOVELS—There is a moderate business doing in these.

SKATES—Continue in active request, and jobbers have now been supplied with their consignments of German goods ex Boston City.

SLEIGH BELLS—Large quantities of these have been moving, but orders are now pretty well filled and the sorting demand has not yet commenced.

WARE—Business in ware is quieter than it was.

SPORTING GOODS—Business in this line is quieter.

CUTLERY—There has been a good sorting enquiry for cutlery, especially in lines in demand at the holiday season, such as case goods.

BUILDING PAPER—Quiet and unchanged. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.40.

HINGES—Quiet and steady. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

SHOT—Without change. Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Quiet, with prices very firm at \$2.15 to \$2.25 for English, and \$1.95 to \$2.10 for Belgian, ex store.

FIREBRICKS—Quiet and firm at \$17 to \$21 per 1,000 as to brand.

METALS.

Trade in metals and heavy iron is quiet, and there are few changes to report aside from a decline in iron pipe.

PIG IRON—Remains very quiet and no new business is expected until after the holidays. Prices are firmer ex store, as follows: No. 1 Hamilton, \$16.50; No. 2, \$15.50; Ferrona, \$16; Siemens, \$16; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—A few round lots of bar iron have sold at a concession, viz., \$1.35, but in an ordinary way values are steady at \$1.45 to \$1.50.

BAND IRON—Unchanged, with business nil. Prices are quoted 35c. advance on bar.

HOOP IRON—Business quiet and prices steady at \$2 to \$2.25 base.

SHEET IRON—Very little trade to report

Christmas Goods.



Decorated Enamelled Wares

(Our own make.)

Tea Pots, Coffee Pots
Cups and Saucers
Mugs, Cuspadores
Wash Bowls and Pitchers
Toilet Sets, etc.,

with assorted decorations on white enamel and with extra decorations on fancy color enamels.

Order Early.

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER
FOR PROMPT SHIPMENT order from McClary's.

Fire Bricks**Drain Pipes****Contractors' Supplies****F. HYDE & CO.**

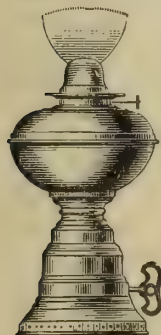
31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

**Improved Wanzer Lamp**

Non-explosive, no chimney, best light, burns Canadian oil perfectly. Soon saves its cost in oil and chimneys. Liberal discounts to the Trade. Every Lamp tested.

WANZER. WANZER LAMP & MFG. CO
HAMILTON.



"BUILD TO-DAY THEN,
STRONG AND SURE,
WITH A FIRM AND
AMPLE BASE."
—Longfellow.

DO YOU?

WISH THUS TO BUILD
an advertisement
in the
**CONTRACT-
RECORD.**
TORONTO
will bring you
tenders from the
best contractors

aside from a few small orders. Prices are steady on the base of \$2.25.

SHEET STEEL—Continues the same, base price \$2.35.

GALVANIZED IRON—Trade in galvanized is quiet, as reported last week, while values are firmly held. We quote: Queen's Head No. 28, \$4 to \$4.15 in case lots.

TINNED IRON—Quiet, on the basis of 5 1/2 c. for 6 x 30 No. 24; other sizes the usual extras.

LEAD PIPE—Only a very moderate trade is noted. We quote: Lead pipe, 7c.; composition waste, 7 1/2 c., with a discount of 27 1/2 per cent.

PIG LEAD—Trade quiet and prices steady, \$3.85 to \$4.

INGOT TIN—A small hand-to-mouth movement is passing at 16c.

INGOT COPPER—Very few orders are noted, while values are nominally steady at 12c.

SHEET COPPER—Only a few sales are noted this week. We quote: Sheathing copper, 14 1/2 to 16c. according to weight and quantity; braziers', 15 1/2 to 17 1/2 c., according to gauge.

CANADA PLATES—Demand is light, and while stocks in the west are not as ample as they might be, jobbers here are well provided. Prices are firmly held on the basis of \$2.10 to \$2.25.

TIN PLATE—Demand is quiet at the moment, but values are very steadily held. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I. C., 3.80; do. I. X., \$4.80.

TERNE PLATES—Trade is quiet, as last reported, and prices are steady on the basis of \$6.

COIL CHAIN—Demand rules much the same, while prices are steady at \$2.85 for 5/8 up.

SHEET ZINC—Trade is steady but very small. We quote 5 to 5 1/4 c.

SOLDER—Without new feature, prices ruling steady at 11 to 11 1/2 c.

SPELTER—As last quoted, at \$4.50 to \$4.70, as to grade.

ANTIMONY—Nothing new to report, prices being steady at 9 1/2 c.

IRON PIPE—There has been a decline of from 2 1/2 to 5 per cent. in certain sizes of black iron pipe. Other sizes remain the same. We quote as follows: Black pipe, 1/4-inch, \$2.05; 3/8-inch, \$2.05; 1/2-inch, \$2.40; 3/4-inch, \$2.85; 1-inch, \$4; 1 1/4-inch, \$5.15; 1 1/2-inch, \$6.65; 2-inch, \$9; and 2 1/2-inch, \$13.60. Galvanized pipe, 1/2-inch, \$4.25; 3/4-inch, \$5.25; 1-inch, \$7.25; 1 1/4-inch, \$10; 1 1/2-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—There is nothing to report in relation to scrap iron, and prices are nominal at \$13.50 to \$14.50.

Cow Ties

Prompt shipment. Full line. 4 kinds. 6 sizes.

The B. Greening Wire Co., Limited
HAMILTON AND MONTREAL

Abbott & Co.

ROLLING MILLS

.. MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
"	Rivet Iron	AVB
"	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
"	Rivet Iron	AXB
"	Stay Bolt Iron	AXB
"	Hammered Iron	AHB
"	Charcoal Iron	ACB

Tyre, Sleigh Shoe,
Axe and Rivet STEEL.

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel**SPORTING GOODS**

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moc-casins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

GLASS.

The jobbers here at a conference held this week agreed upon a uniform advance in window glass, which ranges all the way from 5 to 40c., according to break. The winter basis is now as follows: First break, \$1.40; second do, \$1.50 per 50 feet; third break, 41 by 50, \$3.10, and 51 by 60, \$3.30 per 100 feet.

PAINTS AND OILS.

The manufacturers report little business, with all engaged in stock-taking, as is the uniform practice at present, though we hear of a sprinkling of business being done in mixed paints and varnishes, especially from carriage makers. The close of navigation has not yet made any change in white lead quotations, which were expected to advance, but existing prices are firmly held. Linseed oil is reported a fraction higher outside and an advance is looked for. The same remarks apply to turpentine, which keeps very firm at points of production.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¾c.; kegs, 4½c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

A fair, seasonable trade has been done in petroleum. We quote: Canadian, 14c. in car lots and 15c. in small quantities, and American 16½c. in car lots and 17½c. in small lots.

COAL.

Quiet and steady. Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

Steady, as follows: Beef hides, 6½ to 8½c., as to grade, and lambskins 75 to 80c. each.

MONTREAL NOTES.

There has been a decline in black iron pipe in sizes from ½ to 2 inch.

Jobbers in window glass here have

advanced their prices from 5 to 10c. on first and second breaks and 10 to 30c. on third breaks up.

ONTARIO MARKETS.

TORONTO, Dec. 10, 1897.

HARDWARE.

BUSINESS is being rather surprisingly well maintained. Orders of good proportion are coming in daily, although in fall specialties in the tinware line trade is practically over for the season. If anything, the demand for wire nails is a little better than it was a week ago. The same may be said with regard to cut nails. Fair quantities of horse nails are still going out. A good business is reported in bolts, and a nice trade for this time of the year is being done in rivets and burrs. A slight improvement is to be noted in the demand for clothes wringers. Building paper is active. Manilla rope is dearer by a quarter of a cent. per pound. In window glass there has been a sharp advance of from 10 to 20c. per box. On account of the higher freights, horseshoes are being quoted 5c. higher in Toronto. Payments are rather better in some districts than in others.

BARB WIRE—Jobbers are quoting \$2.30 nominally for immediate delivery, and \$2.15 is being quoted by the manufacturers for January delivery. The United States manufacturers have withdrawn all quotations from this market.

ORDINARY FENCE WIRE, ETC.—Not much doing. Discount, 30 to 35 per cent. for annealed, oiled and annealed, and 30 per cent. for galvanized. Freight is prepaid to the limit of 20c. in 1,000-lb. lots.

PLAIN WIRE, ETC.—Trade is quiet. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—Some of the manufacturers have been busy during the week on special orders, and jobbers report business a little better. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—A little better demand is to be noted for cut nails, although the volume of business is not by any means large. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freights will be equalized from these points.

HORSE NAILS—Orders are coming in freely for fair quantities. Discount, 50 per cent.

HORSESHOES—Trade is about the same as last week. On account of the increase in freight rates prices in Toronto are now 5c.

per keg dearer. The f.o.b. price Montreal is unchanged at \$3.25.

SCREWS—Trade continues fair. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, 87½ and 10 per cent.

BRASS AND COPPER WIRE—Quiet. Discount, 12½ per cent.

BOLTS—Good sized orders are reported. Discounts are: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—While trade has naturally fallen off, there is still a nice business being done, particularly in the copper. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Manilla rope is quoted ¼c. per lb. dearer. Business is not as good as it was. We quote: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Business remains much about the same as a week ago. Discount, 60, 10 and 5 per cent. Delivery points are Toronto, Hamilton, London and St. Mary's. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Orders have been more numerous, although the quantities wanted are small. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Trade is still good. The demand is still chiefly for the commoner qualities. Discount, 45 and 2½ per cent.

FALL SPECIALTIES—The demand is still good for skates, sleigh bells, axes, saws, cow ties, etc. The delayed shipment of

TO THE TRADE

The Chicago Post Office

The Chicago Post Office Building has for the past few months been in process of demolition, to be succeeded by a larger and finer structure on the same site. It was erected in the years 1872 to 1876, and was thoroughly fire-proof, having granite walls, cast iron columns, iron beams, corrugated sheet iron floor arches with concrete top covered with tiles, metal lath and iron roof frame-work covered with slate. From the beginning of the work of demolition, frequent inspections of the metal parts have been made by engineers interested in noting what ravages had been made by rust. A committee was appointed by the Western Society of Engineers to report upon the condition in which the iron was found. This report has not yet been made, but much information has doubtless been secured which will be of great value. Other engineers have pursued independent investigations with results highly reassuring to those having faith in the permanence of iron and steel structures. The metal lath taken from the partitions was found only slightly rusted from actual contact with the moisture of the mortar. It presented no evidence of progressive and continuing rust. The side toward the partition was almost without deterioration. The corrugated sheets taken from the floors were of poor quality and exhibited numerous defects, clearly of mechanical origin, but showed no damage from rust. The upper side, on which concrete had been laid, showed bright metal when the adhering cement was scraped off. The under side, which had been painted, was well preserved. Pieces of the corrugated sheets taken from positions in which concrete had not been filled, leaving hollow spaces, had not sensibly rusted when exposed to such cavities. The beams and columns were all found in excellent condition, with even less indication of rust than would be shown if they had been lying for a short time in a builder's yard.

A notable feature demonstrated was the fact that all iron work exposed to cement had been well preserved, indicating the indestructibility of metal foundations imbedded in cement. The metal lath on partitions covered with lime mortar had been slightly attacked by rust, as above mentioned, but the process of oxidation had only been temporary and not indefinitely continued as might have been presumed. The only places showing deep-seated rust were a few locations in the roof, at which points there had evidently been leakages of long standing, but even in these instances the strength of the metal parts had not been materially affected. The result of the inspection of the iron salvage from this building was particularly gratifying to those who use sheets in interior construction, against which a prejudice has existed because of their presumed liability to rapid destruction by rust owing to their thin body. The makers of metal lath have also been benefited by the demonstration of the very slight ravages of rust. It seems reasonable to presume that, if practically no damage was found after twenty years, the life of the metal parts of a building could be considered practically unlimited. Importance is attached by the engineers from whom this information has been obtained to the fact that the iron used in this building had been well painted before it was covered.

METALLIC ROOFING CO. Limited - TORONTO

Manufacturers of Reliable Sheet Metal Building Materials

German skates are not yet to hand, but they are expected to be in the warehouses early next week. The scarcity in skates is particularly marked in the hockey kind.

SPORTING GOODS—Trade is quiet in all lines.

CUTLERY—A good sorting-up trade is still being done.

SNOW SHOVELS—The demand has fallen off during the week, due no doubt to the mild weather. We quote \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—Large quantities are moving. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Quiet. We quote: Standard, 45, 10, 10 and 10 per cent.; extra, 40, 10, 10 and 10 per cent.; agricultural, 70 per cent.

HINGES—Business is moderate. We quote: 6 to 12 inch, inclusive, at \$3.15 per 100 lbs.; and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—Business is brisk, the demand keeping active notwithstanding the rise in price reported last week. We quote:

in barrel lots: Canadian Portland, \$2.50; English do., \$2.85; Belgian do., \$2.75; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

Dealers have no cause for complaint in regard to the quantity of galvanized iron, black iron, sheet steel, Canada plates, tin plates, lead and copper which have been going out. Prices are much as before.

PIG IRON—No transactions are reported. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Trade is rather quiet. We quote base price at \$1.40 to \$1.45 in car-load lots Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Trade has improved, principally in the larger sizes. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—In the No. 1 grade trade has fallen off, but in the ordinary quality business is much about the same as a week ago. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22,

\$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—A fairly good trade is being done. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Large shipments are being made daily, and jobbers are still finding it difficult to supply certain sizes and gauges in both English and American iron. We quote: Queen's Head (case lots), 16 gauge, 3½c.; 18 to 24, \$3.87½c.; 26, 4½c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26 gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

STEEL BOILER PLATES—Trade continues moderate. We quote: 3¾ and larger, \$1.75 per 100 lbs.

TINNED IRON—Trade is fair although the quantities wanted are small. We quote: Up to 20 gauge, \$5.50 per 100 lbs.; 22 to 24 gauge, \$6.00; 26 gauge, \$6.50; 28 gauge, \$7; special cut sizes, 4¾c.; extra large sizes, 6½ to 7½c. per lb.

LEAD PIPE AND TRAPS—There is not

much doing. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, $27\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—No large sales are reported, but the demand for small quantities is brisk. We quote pig lead at 4 to $4\frac{1}{8}$ c., and bar at $4\frac{1}{2}$ c.

SHOT—Trade is moderate. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, $12\frac{1}{2}$ per cent.

INGOT TIN—Trade is good in both Straits and Lamb and Flag. We quote 16 to $16\frac{1}{2}$ c. for Lamb and Flag and Straits.

INGOT COPPER—No large sales are reported, but quite a number of small shipments have been made at prices quoted. We quote 12 to $12\frac{1}{4}$ c.

SHEATHING COPPER, ETC.—Outside of braziers' and roofers' copper there is little doing. In the two lines mentioned a fair business has been done. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c., according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Some good orders have been received and in general trade has been satisfactory. Prices are firm. We quote: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, \$2; $\frac{1}{2}$ inch, \$2.35; $\frac{3}{4}$ inch, \$2.87; 1 inch, \$3.87, $1\frac{1}{4}$ inch, \$5.10; $1\frac{1}{2}$ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, $\frac{1}{2}$ inch, \$4 to \$4.25; $\frac{3}{4}$ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; $1\frac{1}{4}$ inch, \$9.25 to \$9.62 $\frac{1}{4}$; $1\frac{1}{2}$ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—A rather better demand is to be noted. Discount, 60 and 10 per cent.

RANGE BOILERS—Trade is moderate. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Jobbers are not experiencing any difficulty in supplying the demand. The only line being called for which dealers cannot supply is all bright, six-inch. And orders for this are only coming from certain sections. We quote: Half-polished, 52-sheet boxes, \$2.35; ditto, 60-sheet boxes, \$2.40; dull, 75-sheet boxes, \$2.50; all-bright, "Garth," \$2.60 per box; ditto, "Alaska," \$3.

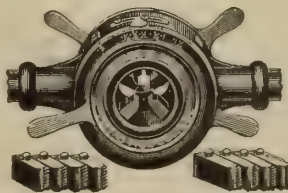
TIN PLATES—Trade is keeping up exceedingly well. Some large sales in cokes are reported, and in charcoals quite a large number of orders have been filled. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade has been decidedly quiet during the past week. We quote: I C, \$6 to \$6.25; I X, \$7.50.

STANDARD of
AMERICA
for
30 Years

NICHOLSON
FILES

NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World



FOR PIPE.

In Stocks and Dies
there is no better than

HART'S DUPLEX
ADJUSTABLE.

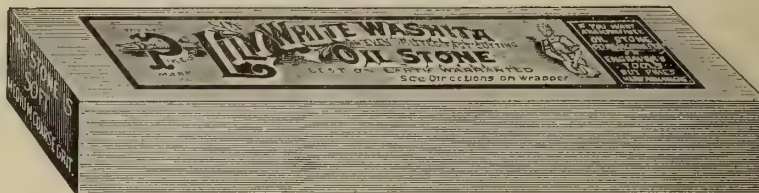
Write for Lists and Discounts
The Hart Mfg. Co.
20 Wood St., Cleveland, O., U. S. A.



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guar-
anteed to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

The Marlin Model 1894 . . .

with its good and reliable SOLID TOP and SIDE
EJECTION is made to take the 38-40 and 44-40
cartridges, but also the 25-20 and 32-20.



IN ALL STYLES—REGULAR AND TAKE-DOWN.

Send for Catalogue to...

For Sale by all Jobbers.

THE MARLIN FIRE ARMS CO., NEW HAVEN, CONN.

SHEET LEAD—Trade is fair. We quote: $5\frac{1}{2}$ c. per lb.

COIL CHAIN—The improvement noted last week has been maintained. We quote: $\frac{1}{4}$ in., $4\frac{5}{8}$ c.; $\frac{3}{8}$ in., \$3.70; $\frac{1}{2}$ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade is steady. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

SOLDER—Quiet. We quote: Standard, 11c.; strictly half and half, $11\frac{1}{2}$ to 12c.

ANTIMONY—Trade is fair in small lots. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

There has been an all-round rise in the price of glass, star having risen 10 to 15c. per box, and double diamond, 20c. per box, in all grades. The new price has not been found sufficient to pay expenses of laying down glass here at present rates, so a new code of discount has been found necessary.

In cases where the discount was formerly 50 per cent., it will now be but $37\frac{1}{2}$ c. We quote: First break in 50-foot boxes, \$1.45, and in 100-foot boxes, \$2.75; double diamond, under 25 united inches, \$4, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

Trade generally is about as usual at this season of the year, though possibly better than it has been the last year or two. Some oil is moving, also a little turpentine, but there is no demand for ready mixed paints, and very little in the way of dry colors and general sundries. There is a good demand for decorative articles such as gold bronzes, gold paints, enamels, etc. Glue is scarce, and demand is fair. We quote as follows:

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12 $\frac{1}{2}$; No. 2, \$4.75; No. 3, \$4.37 $\frac{1}{2}$; No. 4, \$4; dry white lead in casks, \$4.85.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Electric Elevators, Public Building, Victoria, B.C.," will be received until Monday, December 22 next, for the construction of two elevators at the Public Building, Victoria, B.C.

Plans and Specification can be seen and form of tender and all necessary information obtained at this Department, and at the Public Works Office, Victoria, B.C.

Persons are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honourable the Minister of Public Works, equal to five per cent. of amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

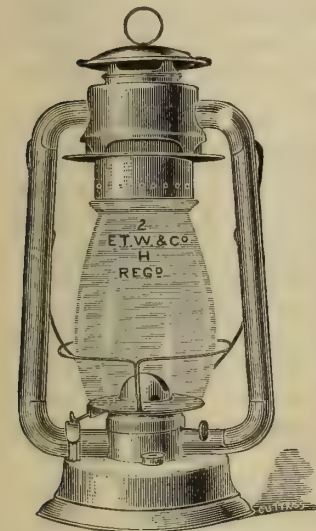
By order,

E. F. E. ROY, Secretary.

Department of Public Works,
Ottawa, Nov. 28, 1897.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.
(50)

E. T. WRIGHT & CO.



Manufacturers
of

Tubular and
Cold Blast
Lanterns

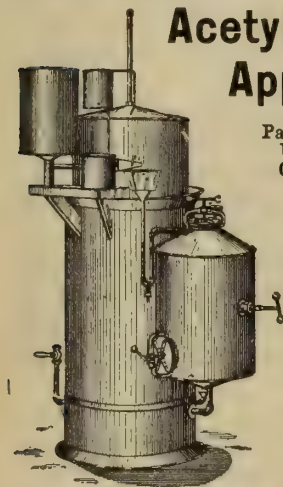
Bird Cages
Mouse Traps
Flour Sifters

Stamped
Re-tinned
and Japanned

..TINWARE

HAMILTON - CANADA.

The Niagara Falls Acetylene Gas Apparatus



Patented in Canada,
United States and
Great Britain.

This is the only machine perfectly automatic in its action, requiring little or no attention. Machines always in stock from 5 to 100 light. Larger sizes on short notice.

Acetylene Gas the
Coming Light.

Cheaper than Electric Light, Coal Gas or Coal Oil.

For Private Dwellings, Business Houses, Churches
Public Halls and Offices.

For particulars write to the

NIAGARA FALLS ACETYLENE GAS MACHINE CO.

Niagara Falls, Ont.

Limited

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orangeminer, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

Business generally is quiet, and will probably continue so until after the holiday season, the factories as a rule clearing out goods on hand at the end of the year. There is a good demand for woolen rags, and the supply is limited. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25 to 30c.; No 1 wrought scrap, 40 to 45c. per 100 lbs; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2½ to 2¾c.; zinc, 2c; scrap rubber, 3½ to 3¾c.; good country mixed rags, 75 to 85c.; clean dry bones, 30 to 35c. per 100 lbs.

SEEDS.

There is practically no demand for medium and low grades of alsike and red clover. There is a fair demand for these seeds in qualities from choice to fancy. Alsike is

WE MANUFACTURE

Wrought
Steel
Shelf

BRACKETS

— IN —

BLACK, JAPAN, NICKEL and
COPPER FINISH.

All sizes in stock. Send for prices.

H. R. IVES & CO.
MONTREAL

-- 50th --

ANNIVERSARY!

ONEIDA COMMUNITY

1848!

Limited

1898!



S. Newhouse

50 YEARS ago Sewall Newhouse, the celebrated hunter and trapper, was making traps for himself and for sale to the Indians, in his little blacksmith shop near Oneida Creek. He made each part by hand, forging the springs from old axe-blades.

50 YEARS ago the Oneida Community bought some Indian lands from the Government, and started their enterprises on the Oneida Reservation. Mr. Newhouse joined the Community, and the Community began to make traps. To-day the NEWHOUSE TRAP is the main reliance of trappers, not only in America, but in every country of the world.

Newhouse Traps

are sure to go and sure to hold.

quoted at \$2.50 to \$4.50; red clover at \$2.75 to \$3.60. There is very little timothy offered. What comes in brings from \$1 to \$1.25 per bushel.

HIDES, SKINS AND WOOL.

HIDES — Market is firm. We quote for both cowhides and steerhides: No. 1, 9c.; No. 2, 8c.; No. 3, 7c.

CALFSKINS — We quote as follows: No. 1 veal, 8 lbs. and up, 12c. per lb.; No. 2, 10c.; Dekins, from 30 to 35c.; culls, 15 to 20c.

SHEEPSKINS — Lambskins and pelts have risen 5c. in price, and are now selling at 95c. to \$1.

WOOL — Pulled wools are still quiet. Prices are unchanged. We quote supers at 21 to 22c.; extras at 22 to 23c.

PETROLEUM, ETC.

Business is good, with prices unchanged. We quote as follows in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; American water white 17½c.; Pratt's astral, 17c. in bulk.

COAL.

The market is quiet but steady, both in Toronto and throughout the province. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut \$4.46, net tons.

MARKET NOTES.

Manilla rope and tarred lath yarn are ¼c. per lb. dearer.

Money is quickly turned with profit handling "Enameline."

Glass has advanced from 10 to 20c. per box, and the discount has been reduced about one-eighth.

M. & L. Samuel, Benjamin & Co. expect to have their long-delayed shipment of skates on Monday, after which they will be in a position to fill all orders.

The Metallic Roofing Co., Limited, Toronto, is adding a large addition to their office, which is required for their staff of draughtsmen, caused by the large increase in their metal ceiling trade.

The old travelers of the John Bowman Hardware and Coal Co., London, Ont., will start out on Monday next, the 13th inst., by which time the company intend to have their new stock open and on shelves ready to fill orders.

UNITED STATES MARKETS.

NEW YORK, Dec. 8, 1897.

PIG TIN — There was no change whatever in the market. London cables were a duplication of those received yesterday, while business was of the same conservative type, with the volume fair. The arrivals here since the 1st inst. have been only 115 tons, and it is figured out that some im-

pression has been made upon spot stocks. Prices remain almost stationary, however, or at about 13.70 to 13.95c. in store and 13.75 to 13.80c. f.o.b. for lots of 5 tons or more. There are only 1,525 tons afloat for this country at the moment.

COPPER — There is no sign of anything in the way of unusually large business being under way, but dealings of very fair total amount are being effected quietly and the market is kept in quite good position despite the continued large output from the mines. Prices may fairly be called steady, with a tendency to harden. On spot deliveries the quotations are 10½ to 11c. for Lake Superior, 10½ to 10¾c. for electrolytic and 10½ to 10⅝c. for casting stock. London cables quoted slightly higher prices for merchant bars, but reflected only fair speculative business.

PIG LEAD — No improvement was visible in the market for this metal. Carload lot transactions only came to notice, the greater portion of which were at 3.72½c. Not over 3.70c. could be realised for larger quantities, prompt or future delivery. London cables quoted £12 17. 6d. for soft Spanish.

SPELTER — There is only a small business at this point and the market remains in a weak condition, with 4 to 4.10c. the best prices for ordinary western. London cable quoted £18 5s. for good merchant brands.

ANTIMONY — The jobbing movement is fair and prices remain at 7¼ to 8¼c. according to brand.

TIN PLATE — Heavy deliveries of American plates on old contracts are supplying the wants of dealers and large consumers to a great extent, and new business is therefore moderate in this quarter. Prices continue low and the tone of the market is weak. Foreign plates are selling in very limited way except to packers of export goods.

IRON AND STEEL — Pig iron moves rather slowly, and, while not positively lower, prices are still rather weak. Old material is also quiet and easy. Steel rails remain quiet and unchanged.

TWO OF A KIND.

A man went along a road and met another.

"Ah!" shrieked the second gleefully, "I am the Fool Killer!" And he gloated over the man.

But the man smiled.

"Shake," he said. "I am a bicycle agent."

And inside of an hour he had sold a '98 model, with spiked handle-bars and explosive tires, and collected the first instalment.

TACK MAKERS CONSIDERING A NEW LIST.

A despatch from Boston says: C. B. Brussell, president of the Tack Makers' Union, says: "As a result of the recent demand of the tack makers of the United States and Canada, for the adoption of the new cutting price list, adopted by us on September 25, and to take effect on December 1, all but five out of 92 in this country and Canada accepted the list, a number, however, conditionally."

"We have been requested by manufacturers and workmen alike to call a joint convention, whereby we can adjust what differences exist. Notices will be sent out this week for such a convention.

"Our relations with the manufacturers are cordial, but business-like, and in the event we cannot adjust our differences amicably, we shall resort to the enforcement of a reactionary list, which will settle the question in the near future on the basis of skill and endurance; if this measure should take effect no doubt tacks would be lower than ever."

H. S. HOWLAND, SONS AND CO.

H. S. Howland, Sons & Co., wholesale hardware merchants, 37 Front street west, Toronto, will after Jan. 1 next occupy No. 39 as well as their present warehouse. This will give them exactly double the office and warehouse capacity they now have. Each building has a frontage of 25 feet and a depth of 165 feet, and has four floors. Workmen are now busy overhauling No. 39.

PERSONAL MENTION.

Mr. Segmund Samuel, of M. & L. Samuel, Benjamin & Co., Toronto, leaves for Great Britain on Monday.

Mr. H. A. Sherwin, president of the Sherwin-Williams Co., spent several days in Montreal last week, visiting the Canadian department.

Mr. W. H. Wiggs, manager of the Mechanics' Supply Co., Quebec, was in Montreal last Monday, and paid HARDWARE AND METAL a short visit. He reports business brisk and the outlook good.

J. T. Russill, hardware retailer, Toronto, who has been unable to attend to his business for some months owing to sickness, has recovered and is now at his shop "in the market."

John McMichael, jr., son of A. A. McMichael, manager of the James Robertson, Co., Ltd., Toronto, aged 32, died on Saturday evening last at his home in Toronto, and was interred on Tuesday in Mount Pleasant cemetery. Deceased up to two years ago was employed with the James Robertson Co.

CASTOR OIL.

THE castor oil bean—seed of *Ricinus communis*, Palma Christi, *Ricinus sanguineus* of the East Indies and Italy, also of the Southwestern States and California, and identical with the "Hique-rillo" of the South American States, grows in abundance without the necessity of cultivation, says an exchange. The beans contain from 50 to 60 per cent. of oil, 100 lbs. of clean seeds yielding about 30 lbs. of fine oil at the first pressing, 15 lbs. of a second quality by additional heat in pressing, and an additional 5 to 10 lbs. by heating the mass with steam or in an oven, and a final pressing. It is only the last named that is of value for burning purposes. In Italy and Calcutta and Madras, for the best oil the pods are dried in the sun, or by artificial heat, and the beans that do not discharge themselves from the pod are threshed out with flails or by treading. The beans are then pounded with wooden mallets or by rams, to crush the shells. A much better plan, however, is practised in the United States, which is to pass the beans through a pair of rollers made of very hard wood, or iron, which are set about 3-16 inch apart, so as to just crush the beans without making them into a pulp, the beans being thrown into a hopper above the rolls. Then for cold-pressed oil, which is the best, the crushed beans are placed into flat canvas bags holding about a gallon each, and piled on flat iron plates, alternating plate and bag, in a screw-press, or, if on a large scale, a hydraulic press, where by slow compression the oil runs into receiving-tubs. This process renders nearly one-half the contained oil. For the balance, the cakes should be removed, crushed, and heated to about the boiling-point of water, then re-bagged, and again subjected to the press, or, what is preferable, to keep the two qualities of oil separate, use a separate press and greater pressure.

There are two methods of clarifying the crude oil as it comes from the press. The first, by sun exposure in shallow tanks made of tin, covered with glass to prevent dust or leaves from falling into the oil. One day's exposure to a clear sun will separate the milk and glutinous matter, which settles, when the clear oil can be decanted from the top. The other plan is to heat the oil in the tanks partly filled with water by means of a jacketted kettle or steam-coil, if convenient, so as to boil the water slowly. This coagulates and absorbs the glutinous matter and dirt that may accidentally get into the oil by handling. On cooling in the tanks, by shutting off the heat, the impurities settle in the water, and the oil can be drawn off from the top. If then found to have any foreign matter it should be filtered through cotton cloth. With the strong solar heat of

tropical countries the solar process is preferred. A small pressing plant of 10 gallons of oil per day will need a pair of hard wood rolls 8 inches long, 6 inches in diameter, fitted in a wooden frame, a scraper on each roll at the lower side, a crank at opposite sides, or geared much after the style of sugar-cane rolls, an oil press, which can also be made of hard wood and laid horizontally, which will allow the oil to drop directly into the pan. The plates may be 3-16 inch thick and about a foot square. The bags may be only squares of light canvas, folded cornerwise over a half-gallon of crushed beans, and laid between the plates. The solar process of clarifying requires a tin vat or pan 3 feet in diameter and 1 foot in depth, and the clarified oil may be dipped from the top. Both medicinally and commercially castor oil is very valuable, also for commercial needs it is hardly as popular as its uses and advantages deserve, and it does not attain to the pre-eminence it should according to its value. Vendors of oils, etc., in agricultural districts, for instance, ought most certainly to push castor oil amongst farmers, for it has proved very beneficial in times of lambing seasons, and for softening leather it has no equal. Rats and mice, which are very destructive vermin to farmers and others, are scared away from all leather articles which are occasionally dressed with castor oil. The question, however, arises as to the kind of castor oil to be used for dressing leather goods, etc. For this latter purpose we strongly advocate what is known as Calcutta seconds. But for medicinal purposes, as may be required by farmers for drenching sheep, etc., we would advocate first qualities. Manufacturers cannot do better for the preservation of leather belting than by using castor oil (Calcutta seconds best for this purpose) as a dressing occasionally, which must eventually show a good return for the expense of what may be termed a few shillings spent in castor oil by the fact of their belts lasting longer, being more pliable, and literally saving pounds. For an ordinary lubricant we must not advocate too largely castor oil, though for very heavy bearings, which easily get hot, it is one of the best oils to be used, and in keeping bearings cool has of late years grown very popular with large manufacturers, who in some instances have adopted the methods of having all their shafting lubricated thereby, and also their cylinders. For the domestic circle, in softening of boots, it has no equal, while with it a polish can easily be got after its use, which is rarely so with other oils.

ADVANCE IN RUBBER GOODS.

There has been an advance of about 10 per cent. in the price of rubber goods of all kinds. This rise is considered to be due to the price of raw material, which has ad-

vanced during the past year 33½ per cent. This advance in raw material is attributed to the increased demand for raw material for bicycle and other pneumatic tires.

IGNORANT SHIPPERS.

The writer was on Saturday shown a foot note to an invoice of goods shipped by a firm in Germany to a Halifax house, in which it was explained that owing to this port being closed to navigation for the season by ice the goods were being sent by the way of Portland, Me. It is quite evident that notwithstanding Halifax has the finest harbor in the world the year round there is room for an "educative campaign." Halifaxians have always treated the statement that their harbor freezes as a joke, under the impression that everybody who said so and those who heard knew better, but constant repetition by jealous rivals or by ignorant people it appears travels so far that it sometimes finds credence.—Chronicle, Halifax.

SHARP ADVANCE IN GLASS.

A sharp advance has taken place in the price of window glass in Toronto this week.

Star in 50-foot boxes is 10c. dearer and in 100-foot boxes 15c. dearer. In double diamond the advance is 20c. per box all round.

The advance is due to two causes: the higher figures demanded by the Belgian syndicate and the appreciation in freight rates.

THOSE DELAYED SKATES.

There is now a prospect that the delayed shipment of German skates ex ss. City of Boston will be in the hands of the wholesalers early next week. Being late, the steamer was ordered back to Halifax after she had entered the St. Lawrence River, the buoys having been removed from above Quebec. As noted last week she had about 60,000 pairs of skates on board, and these were transferred at Halifax to the Intercolonial Railway and are now near at hand.

BARB WIRE.

In consequence of the anticipated wire pool the manufacturers of barb wire in the United States have withdrawn all quotations from the Canadian market. The manufacturers in Canada are quoting for January delivery at \$2.15, although this figure can be shaded, it is understood. Jobbers are quoting \$2.30 for immediate delivery.

Mr. Anson Ritchie, for a Toronto syndicate, will open the Loughboro' lead mines. New machinery will be added, and the newly-acquired smelting works in Kingston, Ont., put in operation.

Mr. A. E. Carpenter has sold out his interest in the Hamilton and Toronto Sewer Pipe Co. to his late partner, Mr. Henry New. It is not likely the west end works will be rebuilt, the new company preferring to build in the east end of Hamilton.

PUSHING WINTER SEASON GOODS.*

IN the first place make a clean sweep of all old or depreciated goods. Purchase new stock in the best possible markets at bottom prices, and in doing so select the winter season goods with the greatest care so as to suit all tastes and local requirements. Spare no time or pains in making the display in windows, shop and showrooms of the most attractive character, and mark each article in plain figures at popular cash prices, and advertise the goods as extensively as possible and in a judicious manner.

Do all that you reasonably can to imbue the assistants with the reality of the obligation which lies upon them to push with all vigor the business which they have adopted, and in order to attain this desirable end offer them every inducement to make your interests theirs also, never forgetting that the strongest influence in your business is an inspiring personality.

Now I am well aware that these and similar methods have already been advocated in the pages of *The Ironmonger* again and again: my excuse, however—if excuse be needed—for reiterating them is my firm belief that the beneficent changes which have recently taken place in the conduct of our particular business is owing in a very marked degree to the way in which these very articles have kept us up to the mark. The present value of such, however, lies in what a famous character of fiction would have called “the application thereof.” In applying these few remarks, then, to the subject under consideration, the first question which naturally arises is: What are the goods that come under winter season goods?

To make a mere summary of them would occupy more space than is placed at my disposal. Besides which certain goods which may find a ready sale in one district are totally unfit for another. Broadly speaking, we shall not be far wrong if we include all, after deducting such summer goods as hay-making and harvesting implements, garden requisites and luxuries, outdoor games, refrigerators and other cooling appliances, spirit and oil cooking stoves and other accessories. Of course, several special classes of goods will naturally suggest themselves as being pre-eminently suitable for the winter season.

“SPIRIT OF PUSHFULNESS.”

I propose treating the subject from the standpoint of the ironmonger who is imbued with that spirit of “pushfulness” which, while inherent only to the few, may advantageously be cultivated by all. In portraying some of the characteristics and methods adopted by this ideal ironmonger I would

notice, in the first place, his belief in being early in the field, that he may catch the ball on the bound; hence his season goods are to hand and duly exhibited while his more tardy neighbor is thinking him, perhaps, a little “previous,” debating within himself as to how little extra stock he shall be able to rub on with, wondering the while whether there is going to be any winter this year worth making much fuss about. One can easily say which of the two will make the scoring.

Again, our ideal man, being fully alive to the importance of arresting the attention of the public, sees to it that his windows are of the most modern type, replete with every convenience for displaying his various classes of goods. I fancy some of my junior readers may be led to say “that given a first-class stock and windows replete with tip-top fittings, it were an easy matter to make an attractive display.” Perhaps so, from a merely artistic point of view, but they would find that this is not all, and that our ideal would require, in addition to this, a window that would pay. Hence he is prepared to sacrifice the artistic to a certain extent by exhibiting goods of one class only at a time, knowing that any and all who are in the market for this class of goods will be convinced from the imposing display he makes that his is the shop where they will find what they require. Then, again, he remembers that the passing public soon becomes accustomed to any display of goods, however attractive and imposing, so he has the windows constantly dressed and redressed, never being short-handed for this department. Window-dressing, however, is only one means to the end he has in view; hence our mentor has the shop and showrooms so arranged that the various methods of lighting, warming, and heating are not only well in evidence as to the articles themselves, but he has them in operation, in order that his assistants may have every facility afforded them for showing and explaining the uses and advantages of the various systems.

JUDICIOUS ADVERTISING.

Our ideal believes most thoroughly in judicious advertising, to which his striking posters, his terse and well-worded circulars and pithy and ever-changing advertisements in the local papers testify. He does not believe in a general catalogue as issued to the trade generally, having learnt from experience that to delegate this work to any other than one's self is worse than useless; with Punch he says that if a thing is to be done well you must “do it yourself.” He is not averse to the small leaflets illustrated and supplied by manufacturers of their specialties; these, having his name and address printed on them in good bold type, he distributes, together with his own, in large

numbers, sending them to the same addresses again and again, until this very persistency and importunity secures a purchaser. Then, again, it is well to make a high bid for the cash which is floating at Xmas and New Year; and from personal knowledge I am able to state that on one occasion arrangements were made with a certain firm to have some £300 worth of their goods on sale or return on the understanding that at least one-third of the same should be kept. It happened, however, that at the end of the time specified he had disposed of more than one-half of the value.

THE WINDOW DISPLAYS.

At this season of the year especially he has his windows, stands and cases filled with novelties and seasonable presents, including bronzes and clocks, jardinières and vases, mirrors and sconces, gongs and musical tubes, other brass and copper goods in endless variety, both useful and ornamental, works of vertu, floor and table lamps, silk and lace shades, cutlery and electro-plate, cased goods, as razors and scissors, fish-eaters and servers, dessert knives and forks, salts and nut cracks—these, together with the many labor-saving machines for household and kitchen purposes, make such a show the like of which had never been heard of before, and it compels that interest which attractive novelties always command. At this festive season our friend also lays himself out for supplying goods on hire for rout or ball; the articles he cannot provide himself he procures through one of the houses that deal in this line of business.

But our ideal master, knowing that, after all, the pushing of his winter goods depends in a large measure on the hearty co-operation of his assistants, he not only pays them on a liberal scale, but treats them in a gentlemanly and considerate manner, giving them a personal responsibility which enlists their tact and interest, and relieves him of much unnecessary work and bother, giving him time to devote to the supervising and general oversight. One man cannot do all, and if he attempts to do so he must be ignorant of the best business methods. Fragments of broken work when put together will not make administration.

Ruskin has well said, “What is rightly done will have a right issue.” Hence a business run on the lines herein indicated must in the nature of things succeed, and is the best and surest way to push the sale of the winter season goods. “Human nature is the same everywhere; it applauds success, but it has nothing but scorn for defeat.”

The general stock of J. R. Jaynes & Co., of Alvinston, valued at \$11,830.95, has been sold by auction to McLean & Co., of Ridgetown, at 68 cents on the dollar.

*First prize essay in competition inaugurated by *Ironmonger*, London.

TO PHOTOGRAPH A DISPLAY.

It is well known that one of the chief reasons why more window trimmers do not photograph more of their displays, so as to have them for future reference, is the poor results that are usually obtained, says a Chicago paper. Reflections spoil over half the pictures that are taken, and after one has made three or four unsuccessful attempts to get a good photograph of a window it is no wonder that he gives up in despair.

One who understands the many peculiarities of photography says that reflection or the spot of white that appears on the negative if an electric light is allowed to burn during the exposure, are the commonest annoyances and are much exaggerated in any attempted reproduction for purposes of publication. "One method to produce a good picture," he says, "is merely a large black screen to cut off the reflected image. A commercial photographer of wide experience and high attainment has, however, been making experiments of late in this direction, and gives as the final result of his investigation the conclusion that perfect results are almost invariably secured if a very early hour, about sunrise, be selected, and the plate given a long exposure. At such a time, when the day is fine and still, the light comes from the east, low in the horizon, and the atmosphere seems also to possess a peculiar actinism of considerable help in producing a clear, sharp negative."

TESTS OF FLOORING MATERIAL.

The Boston Journal of Commerce gives the following interesting results of a thorough and careful investigation recently carried out as to the comparative durability of different flooring materials. In the tests an ordinary iron rubbing wheel was used, like that employed by stone workers for rubbing a smooth surface on marble or sandstone, and the samples to be tested were fastened to blocks of sandstone, laid face downward on the rubber wheel, which revolved at the rate of 75 revolutions a minute, being supplied with sharp sand and water. The blocks to which the floorings were cemented were of equal weight, so that the rubbing was effected under nearly the same pressure in all cases. Curiously enough, the material which resisted best this severe trial was india-rubber tiling, which, after an hour's rubbing, lost only 1-64 inch of its thickness, and next to this, English encaustic tile gave the best results, losing only 3/8 inch in an hour's treatment. The artificial stone, known as "granolithic," was third, losing 3/8 inch, while North River bluestone lost 9-16 inch. All the marbles wore away very rapidly. A piece of marble mosaic disappeared entirely in 35 minutes, while solid

white Vermont marble lost 3/4 inch in an hour. Most of the wood floorings resisted abrasion better than the marble; thus white pine lost only 7-16 inch under treatment that removed nearly twice as much from solid marble, yellow pine about like white, and oak lost more than either of the pines.

AMONG THE RETAILERS.

Pushing Sporting Goods.

A few weeks ago I made mention of a Toronto retailer who was attracting large crowds daily by an exhibition in his window by an expert athlete, who displayed the method and advantage of using a health exerciser. Since that mention this firm has continued these exhibitions, giving a practical illustration of how to use the punching bag, dumb bells, Indian clubs, bar-bells, etc. This week a couple of experts are giving exhibitions of fencing. On enquiry, the manager of this firm said that this move had undoubtedly been a good one, the sales of every article exhibited being greatly increased, a better all-round demand for sporting goods being created. Said he: "An exerciser which can be used regularly indoors is an article which can and should be pushed. People generally would prefer to be physically stronger than they are, and doctors are realizing more the benefit of physical training, especially for women, and if the public is educated regarding the method of using any article which is neither very expensive nor very hard to understand, a demand is easily created. The time is coming when regular physical training will be a part of every man's and every woman's life." One thing is sure, and that is that many hardware dealers think practically nothing about sporting or exercising goods. Such men can afford to give the matter "their most serious consideration" for at least one week every fall or winter for indoor goods, and every spring for outdoor articles.

To Catch Christmas Trade.

The majority of hardware dealers I have spoken to are determined to catch a fair share of the Christmas trade. The principal things pushed will be table and household cutlery, plated ware, skates and sleigh bells. One firm will make a special run on kitchen articles. Skates seem to be in greatest favor, as the reduced price this year and their acceptability with children is creating great confidence in the minds of dealers regarding the sales of this article probable. Cutlery and plated ware are also expected to meet with brisk sale, so some retailers will have attractive displays of these lines in their windows about Christmas time. If the weather is favorable small sleighs will be pushed for presents to children, and sleigh bells, etc., for general sale.

THE RAMBLER.

BUSINESS CHANCE.

WANTED TO EXCHANGE ONE OR TWO good Farms in the Northwest for stock of Hardware. Address Jas. W. Fullbrook, Stonewall, Man. (52)

SITUATION WANTED

AS HARDWARE SALESMAN; EXPERIENCED young man. Apply, "Clever," HARDWARE AND METAL. (50)

FOR SALE.

THE BEST HARDWARE BUSINESS IN ONTARIO; no opposition; the best stand in town; stock about five thousand. For further particulars address Box D, HARDWARE AND METAL. (t.f.)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Going to Retire? Want to Sell Out?

If so, say so in HARDWARE AND METAL. It reaches the most likely buyers. Two cents a word each insertion.

WANT ADVERTISEMENTS

Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of

10 cents

HARDWARE AND METAL, Toronto

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIC IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

A STATEMENT of the affairs of Cardinal & Co., general merchants, St. Stanislas de Kostka, Que., is being prepared.

Louis Komienki, general merchant, Digby, N.S., has assigned.

Wm. Genereux, general merchant, Grand Piles, Que., is offering 20c. on the dollar, cash.

A. Thibaudeau & Co., general merchants, Sorel, Que., have fyled consent of assignment.

M. Lepage & Fils, general merchants, St. Adolphe de Champlain, Que., have assigned.

Assignment has been demanded of Pre-mont & Co., general merchants, St. Felicité, Que.

J. & S. Jones, hardware merchants, Pembroke, Ont., have assigned to Gideon Delahaye.

Kent & Turcotte have been appointed curators of J. G. Trahan, general merchant, St. Hyacinthe, Que.

J. W. Seale, general merchant, Farnham, Que., is endeavoring to sell out and is settling with his creditors.

DeWolf, Son & Co., carriage makers, Halifax, have assigned. The assets are placed at \$32,000 and the liabilities at \$24,300.

A. A. Laferriere & Co., general merchants, Berthier, Berthier Co., Que., have assigned and are offering to compromise at 50c. on the dollar.

PARTNERSHIPS FORMED AND DISSOLVED.

The Montreal Hide and Calfskin Co. have registered a partnership.

A. & W. Hicks, general merchants, Hampton, N.B., have dissolved.

Church, Mitchell & Fee, saw millers, etc., Drummondville, Que., have dissolved.

H. and F. Hoerr, manufacturers of pianos, Toronto, have dissolved, F. Hoerr continuing.

Arthur Mack is retiring from the firm of A. E. May & Co., implement agents, Carberry, Man.

Emile Galibert and Wm. J. Price have registered as proprietors of the Montreal Wool and Sheepskin Co.

Corydon H. Wood and John Brown have registered as proprietors of the Victoria Manufacturing Co., manufacturers of wire nails, Montreal.

SALES MADE AND PENDING.

W. A. Tom, blacksmith, Solina, Ont., has been succeeded by George Wood.

G. A. Marion, general merchant, Rockland, Ont., has sold his stock at 70½c. on the dollar.

J. N. Hamel, general merchant, Pont

Rouge, Que., has sold his stock at 61¼c. on the dollar.

The effects of the estate of Robert Saxby, dealer in engineers' supplies, Toronto, will be sold by auction.

The stock belonging to the estate of Pearce & Co., general merchants, Mitchell, Ont., is to be sold.

The stock belonging to the estate of J. R. Jaynes & Co., general merchants, Alvinston, Ont., has been sold.

The assets of R. J. Latimer, agent for implements and carriages, Montreal, are advertised for sale by tender.

CHANGES.

Daniel J. Driscoll has commenced business as lumber merchant in Ottawa.

The Arctic-Ray Mining Co., Windsor, Ont., are applying for charter of incorporation.

The Gold Fields Co. of Michipicoten, Limited, have obtained charter of incorporation.

The Deseronto Milling Co., Limited, Deseronto, Ont., has obtained charter of incorporation.

R. C. Carter has ceased doing business under the style, St. Lawrence Portland Cement Co., Montreal.

FIRES.

M. B. Perine & Co., manufacturers twine, etc., Doon, Ont., have suffered loss by fire.

The foundry of J. D. Weir & Son, Moncton, N.B., has been burned out, loss estimated at \$4,000, insured.

DEATHS.

M. Legault, mill owner, Steadele, Que., is dead.

C. W. Trinholm, general merchant, Grand Pre, N.S., is dead.

Alfred Ryley, of Ryley & Son, general merchant, Bethany, Ont., is dead.

Angus McPhee, of McPhee & Co., carriage makers, West Bay, N.S., is dead.

CONTRACTS FOR HARDWARE.

THE Board of Control, of Toronto, on Tuesday afternoon opened tenders and awarded contracts for supplies of hardware, etc., for the year 1898 as follows:

Hydrants, St. Lawrence Foundry Co., two-way hydrants, \$27.50; three-way, \$29.25. Hamilton Fire Escape Co., four-way hydrants, \$57.

Valves, C. H. Perkins, stop valves, six-inch, with sockets, \$13.45; with flanges, \$13.45; twelve-inch valves, \$28.45.

Waterworks lumber, the Reid Co., for one to four inch pine, \$12.79 per 1,000 feet, board measure; hemlock, \$9.17; for dimension pine timbers, \$12.79.

Lead pipe, to the Ontario Lead Pipe & Wire Co., \$4.40 per 100 lbs.

Stop-cock boxes, St. Lawrence Foundry Co.

Lumber for sidewalks, the Reid Co., planks, scantling and boards, \$11.67 per 1,000 feet, board measure.

Cast iron pipe, St. Lawrence Foundry Co., \$3.12 per length for 4-inch, \$4.63 for 6-inch, and \$13.13 for 12-inch. This is slightly under the prices of Gartshore, of Hamilton, in each case.

Cedar posts, the Reid Co., at \$4.49 for first quality and \$4.29 for culls.

Wire nails, the Aikenhead Co., at \$1.85 per 1,000 pounds for five-inch nails, and 15c. allowed for returned boxes.

Coal and wood, to the Standard Fuel Co., \$3.89 for Streetsville soft coal, \$5.10 for all sorts of hard coal.

General hardware supplies, W. F. Maas, \$4.613, provided the Engineer endorses extensions of figures. The tendering in this section was very wild, one tender running up to \$6,964.

Rubber supplies, Gutta Percha Co., provided Mr. Keating approves.

Brass and bronze castings, Dean Bros.

Special castings, to Galloway, Taylor & Co., at \$1.40 per 100 pounds.

Baylis Manufacturing Co.

16 to 30 Nazareth Street. MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE
LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.

HARDWARE DEALERS' MAGAZINE

Largest Circulation in its field in the World

One Dollar
a Year.



D. T. MALLETT, Publisher
271 Broadway, New York



Specimen
Copy upon
Request

DEATH OF A HARDWAREMAN.

Mr. James Mason, of the firm of Marshall & Mason, hardware merchants, Strathroy and Sarnia, died on the 7th inst. at the residence of his mother-in-law, Mrs. J. Perkin, No. 340 Central avenue, London, in the 33rd year of his age. Mr. Mason who was a native of this county, was at one time traveler for the wholesale firm of Bowman, Kennedy & Co., London. He moved to Strathroy in 1892, and thence three years later went to Sarnia to manage his firm's business there. Deceased, who was much esteemed by a wide circle of acquaintances, was a member of the Masonic brotherhood, being connected while in this city with Lodge No. 209a, subsequently joining Beaver Lodge, Strathroy, and was a member of the Presbyterian Church. He leaves a widow and one child. Mr. Mason was ill with typhoid-pneumonia for four months and was treated in the General Hospital in London. After his recovery he went on a visit to his wife's people. Lung trouble resulted from his illness, and he passed his closing days at the home of his mother-in-law. His mother is a resident of Paisley, his father being dead. The funeral took place on Thursday at 3 p.m.

STEEL CARS.

In an article on "The Coming of the Steel Car," in The Railroad Gazette, it is stated the present development of extra large cars is in steel, because steel cars can be made lighter than wooden cars of the same capacity. A more paying load can be hauled in a train of the same gross weight. Capacious steel cars can be built for approximately the same cost to the ton of carrying capacity as wooden cars. To handle a given amount of traffic fewer cars would be required, and for a given load the train would be shorter. Less track and yard room would be required, fewer men to handle and care for the rolling stock would be employed, and other advantages, of short as compared with long trains on the road, are sufficiently obvious.

NEW HARDWARE FIRM.

The latest addition to the list of retail hardware stores of Belleville is W. W. Chown & Co., who have recently opened up with a new stock of the latest shelf and heavy goods on the front street in a handsome solid brick shop, 25 x 90, with plate glass front and all the latest improvements in shop furnishings. This makes Mr. Chown, the senior partner, a very busy man, as he still retains the management of the Chown Stamping Works of the same town. They also show a complete stock of all the latest improved stoves, which appear to great advantage. They report business good.

Boeckh's Curling Brooms

are made of specially selected corn, free from seeds, and because they have a bamboo handle they are very light.

But they are strong and durable, and serve an ideal purpose in taking the place of the old-fashioned heavy hardwood-handled Brooms. They are seasonable to have in stock right now.

With
Bamboo
Handles

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

JACK KNIVES

Single and Double Blade.

SCISSORS

RAZORS

Pen Knives—all patterns.

H. BOKER & CO.

TREE



BRAND

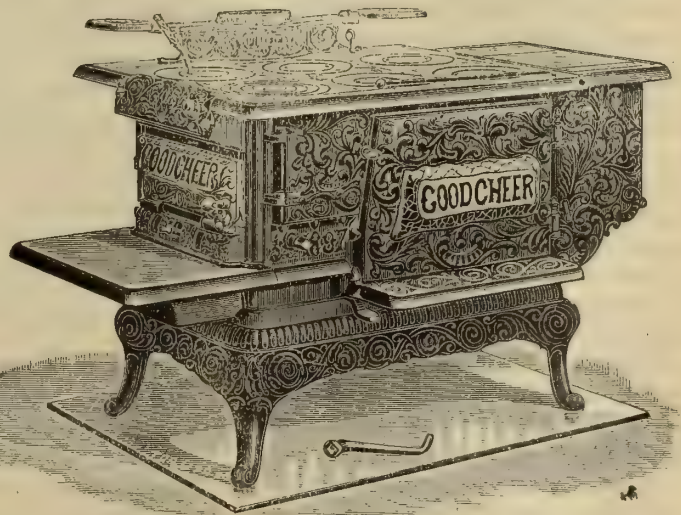
Largest assortment and best value ever offered.

Rice Lewis & Son, Toronto

Good Cheer Ranges

LARGE
STEEL
OVENS

Three styles each
— Square and
Reservoir, with
or without High
Shelves or Clos-
ets, Coal and
Wood, or Wood
only.



Sold by Leading Dealers Everywhere.

All "Good Cheers" Guaranteed Perfect.

The Jas. Stewart Mfg. Co., Limited

Represented in Manitoba and Northwest
Territories by J. H. Ashdown, Winnipeg.

WOODSTOCK, ONT.

SOME EXTRA DEPARTMENTS IN HARDWARE.

By "BEE BEE," IN IRONMONGERY.

"Through carefully reading Ironmongery from time to time I have decided to add china, glass, linoleum, cheap oilcloth and some descriptions of furniture to my ordinary hardware business. Can you give me a little general advice for my guidance?"

SO reads a little extract from a recent letter received by the editor of Ironmongery, and which he has sent on to me with the suggestion that I should take it as a text and give his correspondents the benefit of my experience. Now the adding of extra branches and departments to a business, whether hardware or otherwise, is one of the signs of the times. The ironmonger's neighbors take up extra lines without regard to the feelings of their fellow-tradesmen, and the ironmonger who wishes to keep pace with the times must "go and do likewise"—he is forced into it by competition. Hence it has come about that so many of us, especially we provincial ironmongers, are puzzling our brains as to the best extra lines to add to keep up our returns and to keep pace with our competitors. Some of the most progressive ironmongers have now largely become house furnishers; they have shown no hesitancy in the matter, but they have boldly taken up special departments which mainly are akin to ironmongery goods. Others not so bold, and perhaps with not so much capital at their disposal, have taken up one or two extra departments—to use their own words—"as a trial." Then there are those who feel that they would like to take up extra departments, but have not up to the present, simply because they have not enough confidence in themselves; they are afraid of incurring the displeasure of their neighbors, or they feel they have had no experience in these special matters, and thus do not know how to make a beginning, or where to buy to the best advantage. The sooner these doubtful ones realize that their neighbors do not study them or their interests the better. In these days of cutting competition it is each individual for himself and the devil take the hindmost. We cannot afford to be ironmongers pure and simple, because sooner or later our rivals will have got the "plums," in the shape of some of the extra departments embracing house furnishing, electrical and general engineering, cycle agents, glass, earthenware and china dealers, seed merchants, linoleum, matting and carpet factors, photographic instrument agents, oil and paint merchants, sportsmen's outfitters, gunsmiths' implement agents, and, in fact, the list might still be augmented.

SOME LINES TO CARRY.

Now it will be readily admitted that of all the extra departments which the ironmonger can take up, earthenware, china and glass

seems to be the branch most universally adopted—and rightly so; then there is linoleum, cocoa-matting, mats, and carpets and rugs, and general every-day furniture, too. This seems rather a large undertaking for one to launch out upon all at once, when he has never before given his attention to any of these lines. It means also more room being required, and it means the outlay of more capital, but as a compensation, I may say, after having had many years experience in these and sundry extra departments of an ironmongery business, there are no branches which pay better than those mentioned. Why it is so every ironmonger knows. He has not to get his living out of these extra departments alone, but he has other things to sell to help him to his profits. In many china shops articles are sold at 100 per cent profit, and in many instances at an even greater profit. There is nothing which makes a finer display and show than these goods, and it is a department which, to be done properly, wants keeping separate and distinct from hardware. The ironmonger too, must not run away with the idea that it is a trade to be picked up in a minute; if so, he will find himself mistaken, because in the china and earthenware business very few things are sold twelve to the dozen, but by what is called the "long dozen." There is great scope with this department, for these goods are in daily request—people must have them, for they will break. Then there is the hire department connected with it, the advantages of which I need not enter upon here; suffice it to say that it is a very paying feature of this business. I do not advocate a beginner going in for an elaborate and comprehensive stock at the start, but just to choose every-day household articles for domestic and table use, such as dinner and tea services, toilet sets, cheese dishes, jugs, toast racks, teapots, egg stands, cruets, butter dishes, cucumber dishes, fruit dishes, umbrella stands, and articles for presents, with any pretty local views upon them. We must walk before we run in these matters, and other additions can be made afterwards, such as the heavier or "blackware goods," as they are called—milk pans, cream pots, pork pots, ham pans, stone bottles, foot warmers, stew jars, jam jars, poultry fountains, spittoons, and dog troughs.

SANITARY ARRANGEMENTS.

Improved sanitary arrangements, too, have largely increased the output of this class of goods, and there are a great many articles which an ironmonger could stock for the benefit of his plumber and builder friends and for his own profit. I refer here more particularly to closets, basins and lavatories. At starting the business in these goods I would suggest that the goods be bought from an agent, and unless the buyer

can go down into the pottery districts and make his own choice there he cannot do better than go to London to some of the great warehouses and showrooms which abound in the vicinity of Holborn and Holborn Circus. He will find that many of these agents sell at manufacturers' prices; in fact, that many of the pottery firms have London showrooms themselves, where their newest patterns can be seen and purchased. When once he gets a start and shows the goods in his window he will soon be inundated with travelers, who usually carry a splendid assortment of patterns with them, and thus he can gradually become acquainted with various firms who have distinctive designs and patterns from each other, and he can then use his own judgment as to what to buy and who to buy from. Another great help is that an ironmonger always has Ironmongery at his back in these special matters and the editor of that journal, who has special facilities for knowing the best markets to buy in, is ever ready to promptly respond to such inquiries; in fact, invites such inquiries from legitimate members of the trade who have any desire to enter upon these new branches, and who are in the least doubt as to where to obtain certain special goods.

JUDICIOUS SELECTION.

With regard to linoleums, matting and mats, a great stock is not necessary; neither is it expedient. A few neat patterns in different widths of medium quality are plenty to start with because makers send out such splendid pattern books of the actual articles made that any design and size can be obtained to order, and secured in a very few days. The ironmonger should show two rolls of linoleum, of different widths, prominently against the entrance of his establishment, papering the bottom of the rolls so that they may not get dirty, and put such a price upon them as will command a sale, or induce customers to look inside to see the remainder of the stock; this will also apply to cocoa matting. The ironmonger should have a wire mat at the entrances to his premises, with his name worked in the meshes, and also a large yarn mat for advertising purposes made with letters of a prominent color, announcing that such mats can be made to any given size and quality upon the shortest possible notice. This is one of the best possible means of selling mats, and the writer has secured many orders for chapels and churches, traps and carriages, by such a mat being kept in a conspicuous place where customers cannot help seeing it.

FURNITURE.

As to stocking certain classes of furniture, much may be said for and against it. One thing is certain, however, and that is, that

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.

Emery and Hardware Specialties

COOKE HARDWARE CO.

HAMILTON, ONT.

McDONALD & ALLEN

KINGSTON

Manufacturers of

Door Knobs, Japanned, Nickel, Silver and Bronze Plated and Real Bronze.
Sold by all Jobbers.

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
188 and 190 McGill St., MONTREAL.
WORKS: 274 St. Patrick St., MONTREAL.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The ...

John Morrow Machine Screw Co.

Ingersoll - Ontario.

The Niagara Falls

Metal Works Company, Limited

Niagara Falls - Ont., Canada

MANUFACTURERS

Brass Foundry, Brass Finishing, Light Drop Forging, Malleable Iron Foundry, Wire Chains, Safety Chains, Plumbers' Chains, Cut Link Steel Chains. Articles cut, formed and stamped from Sheet and Band Steel, Iron, Brass, Copper, German Silver and Aluminum. Close Plating and Electro-Plating.

much extra room is wanted to store and properly show it; and also to make the department a success, a really good stock should be kept, because people like to see the actual article they are buying. Catalogues are a great help, of course; but at the best they are somewhat misleading, and do not properly and adequately represent the articles. If the ironmonger has the room, therefore, to show these goods to proper advantage, I strongly advocate their being taken up and pushed by every legitimate means. Of course there follows the inevitable advertising which the opening up of these new departments will necessitate, but having once made up his mind to take any or all of these departments up, the ironmonger must go into them with that amount of enthusiasm which will command eventual success.

PICTOU COAL MINES BOOMING.

Not at any time during the past 12 or 15 years has there been such a rush of work at the mines of the Acadia Coal Co. The Acadia is rushed, the Albion is pushed to its utmost capacity, and Thorborn is busy as a nailer. At the Albion during the past fortnight or three weeks a large number of men have been taken on in an effort to catch up with orders which daily came pouring in. The oldest official of the company can scarcely remember a time when orders for immediate wants were sufficient in number and quantity to keep the pits running full time for four or five weeks. We are all pleased at this, for Stellarton stood greatly in need of a revival of business. Those who made all manner of evil predictions, and asserted that the advent to power of a Liberal Government meant injury to the coal trade must experience peculiar sensations. At present they are petrified with astonishment. By and by we may expect to see them clothed in sackcloth and ashes. —Stellarton Journal-News.

A BUSY DOOR KNOB FIRM.

Apparently business with Messrs. McDonald & Allan, of Kingston, manufacturers of door knobs, etc., is rushing, for when HARDWARE AND METAL was in that city this week they reported orders coming in very fast, and just lately have found it necessary to increase the staff. This firm show a handsome range of door trimmings, from the commonest porcelain knob, which is generally retailed at 10c., to the very highest grade of solid bronze in all the latest artistic patterns. Dealers handling these goods are not, as a general thing, aware of the amount of work required in the manufacture of a door knob, but, through the kindness of Mr. Allan, we had the whole operation explained to us and were really surprised. Their goods can be procured from all the leading jobbers of Canada.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

Oil and Artesian Well Pumps, Casing, Tubing, Fittings, Drilling Tools, Cables, etc.



BROOM AND CORDAGE WORKS.

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web and Rope Halters, Rope Cattle Ties Cordage and Twines.

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IRON FENCING

and all kinds of

Iron, Wire and Brass Work

Address—
Toronto Fence and Ornamental Iron Works

(Joseph Lea, manager)
ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings, Piano Stool Feet, Novelties, etc. Bicycle Work a specialty. Special attention given to Job Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded Spring. "The Latest and Best." Sold by all Leading Jobbers in Canada.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales made and repaired.

Write for Catalogue.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

BENEFIT OF A RADIATOR OVER A FLAME.

A CORRESPONDENT of Metal Worker wrote: "Suppose a burner on a gasoline or oil stove is lighted to warm a room, will the same amount of flame make more heat in the room by placing the oven over the burner, and, if so, why?"

Metal Worker's reply was as follows: "We submitted this inquiry to Professor J. H. Kinealy, St. Louis, who comments upon it as follows: This is an extremely interesting and important question. But in order to discuss it we must suppose that when the oven is put on the stove nothing else is changed, and that exactly the same amount of gasoline or oil is burned per hour with the oven on as was burned when it was not on. The amount of heat generated per hour by a flame depends only upon the nature of the substance burned and the weight of it burned per hour. For every pound of gasoline or oil burned in the stove there is generated a certain fixed amount of heat, which is entirely independent of whether the oven is on or off, and which depends only upon the quality of the gasoline or oil. All of the heat generated in the room per hour by the stove is used in heating the room, whether the oven is on or off. But the part that is effectively utilized is very different in the two cases.

"When the oven is not on the stove the room is warmed entirely by convection, or currents of air set up in the room. The hot products of combustion rise from the flame, and at once mingle and mix with part of the air, which is heated. This hot air and the products of combustion rise to the top of the room and spread over the ceiling. The air of the room is hottest near the ceiling, and is coolest near the floor. The hot air near the ceiling comes in contact with the walls of the room, is cooled, and falls along the walls to the floor. It flows then along the floor to the stove, and then is heated and rises to the ceiling again. Thus there are upward currents of hot air at the stove, currents along the ceiling to the walls, downward currents along the walls to the floor, and currents along the floor to the stove. A hot gas or a hot flame has an exceedingly small radiating power, so that objects in the room will derive almost no heat from the stove unless the hot air comes in contact with

them. And unless the amount of heat generated by the stove is quite large, the whole air in the room will not be circulated much. A part of the heat generated will be concentrated at the ceiling, where it is of little use in heating objects in the room, and a part will be brought directly to the cool walls, through which it will pass to the cool air on the outside.

"When the oven is on the stove the hot products of combustion from the flame come directly in contact with it and give to it a large part of their heat before mixing with the air and rising to the ceiling. The oven acts as a reservoir of heat, catching it from the flame and storing it up before it can be carried to the ceiling and the cold walls. As the oven becomes hot it gives off its heat by radiation, and the bodies in the room that are nearest to the oven receive the greatest amount of the radiated heat. If there are many people or objects in the room close to the stove they will receive almost all of the radiated heat from the oven, and the cool walls will receive very little. The air in the room receives almost none of the radiated heat from the oven, as radiant heat passes through air with almost no loss. But some of the air comes in contact with the hot oven and is heated. This warm air mixes with the products of combustion when they leave the oven and rises to the ceiling, then flows to the walls, and then falls to the floor. Thus, when the oven is on, a small part of the heat generated is carried to the ceiling and walls by convection currents, but a large part of the heat is first stored up in the oven, and is then radiated to objects near the stove. When these objects are heated they give heat to the cool walls.

"To sum up, then: When the oven is not on, almost all of the heat is carried away from the stove to the ceiling, and then to the walls, through which it passes and is lost. But when the oven is on a large part of the heat is received by it, and then most of it is given to the objects in the room, and they give a part only of what they receive to the cool walls.

"When the oven is on the occupants get more benefit from the heat generated than they do when it is off."

VENTILATION OF SCHOOL HOUSES.

Prof. Alexander Chaplain, of Easton, recently read a carefully prepared and instructive paper before the annual meeting of the Association of School Commissioners of the State of Maryland at Baltimore on the following subject: "In the Construction of New School Houses, with Limited Means, What is the Best Plan for Ventilation?" Prof. Chaplain's views met with unanimous approval. In part he said:

If fresh air is introduced into a room a corresponding provision must be made for the escape of foul air, for only as much air can be brought in as the ventilating shaft discharges foul air. The ventilating flue, therefore, should be large enough to insure the free circulation of the pure heated air through the room in the full measure and capacity of the cold air box and the heating apparatus. Uniform and reliable ventilation can only be secured by expensive appliances and fan machinery, which cannot be thought of for our ordinary and simple school buildings. But when it is asserted by those who have given the subject most attention that one-half of the diseases which afflict

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power)

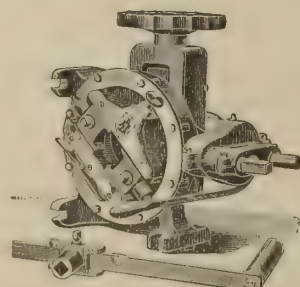
Armstrong's Adjustable Stocks and Dies,
Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office,
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.



BRASS GOODS

FOR

Made only by the very best makers.

Steam-Fitters, Plumbers, etc.

Full line carried in stock. Low prices. Prices quoted on application.

MECHANICS SUPPLY CO., 96 St. Peter St., QUEBEC

CURTIS & CURTIS No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

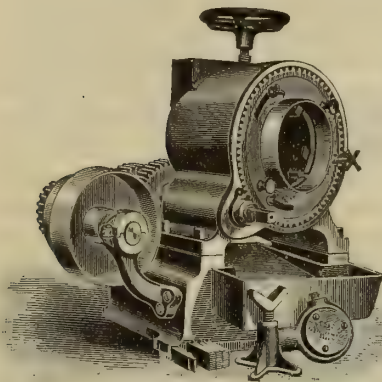
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

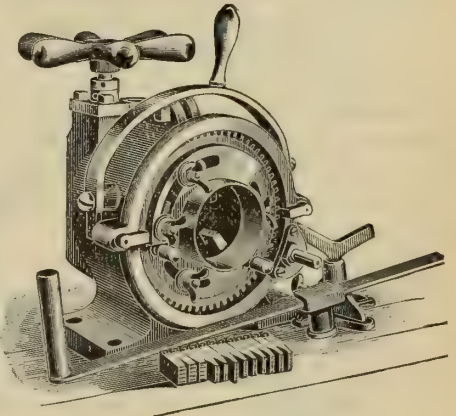
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.;
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers,
Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL RUBBER GOODS

H. O. CANFIELD - BRIDGEPORT, CT.

MOULDED RUBBER GOODS

Hardware, Plumbers' and Bicycle Specialties.

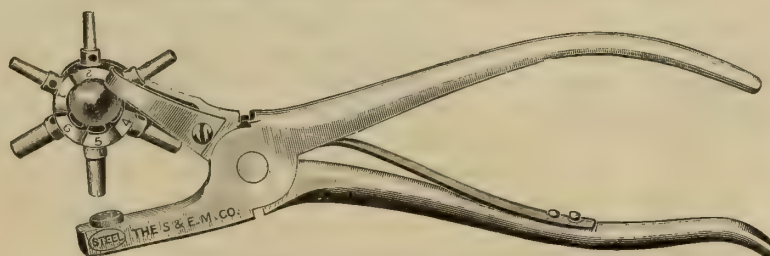
OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897

CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian **HARDWARE**
AND **METAL**.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

the human race can be traced directly to the breathing of impure air, and that children are many times more sensitive to atmospheric poison than adults, it is a crime for those who have charge of planning and constructing our school houses to neglect to provide them with at least some simple and economic means of ventilation.

INTERESTING PLUMBING CASE.

THE Halifax Board of Health has a case before it which is attracting the attention of the plumbers and a great number of the citizens of that city. Some time ago A. C. Hawkins, father of Ald. Hawkins, a member of the board, gave a contract for a plumbing job in his house. Mr. Hawkins claimed that the work was not satisfactorily done, so the plumbing inspector and the city engineer were called in to test the work. The case came up before the board on a report from the city engineer, who reported that the work was in the main well done, and that the tests were satisfactory up to a certain point.

At a meeting of the board last week an investigation was held into the matter, and the evidence of the city engineer, the plumbing inspector and Mr. Hawkins' daughter were taken. The city engineer stated that he tried the pipes up-stairs and down by the smoke test and found everything tight, but a few minutes after, when he was asked by Dr. Hawkins to make another test up-stairs, he found a leak in a part of the main soil pipe, in the bath-room, but the leak appeared to be in a place scraped bright, from an abrasure in the pipe. The peculiarity of this was that no leak had appeared so very recently, and that he believed there were evidences of the pipe having been tampered with in the meantime. A second test was then made down-stairs, when, strange to say, there was found in the pipe a hole big enough to admit a pencil. The pipes in the house were laid in accordance with the spirit of the rules, and, in his opinion, would drain to a stop and waste cock.

The plumbing inspector, Claude Donovan, was then called. His evidence bore out the statements of the engineer. He also stated that the pipes used were not only uniform, but were over weight.

After three hours' investigation the board adjourned till Tuesday this week, when Mr. Hawkins was examined. He said he thought he called the attention of the engineer to the small size of the pipe used in the work, but he was not sure. He said he smelled smoke every time the test was applied in the house. He could not see it owing to his poor eye sight. He never felt satisfied that the work was done properly. He admitted that he saw Ald. Hawkins use an instrument on the pipe joint and saw him pick the putty out with it. The machine

was something like a tooth pick or a key. He said his daughter told him that the work was not being done in accordance with the rules and regulations of the board. He also stated that he told the engineer that if the city would not put on a water meter, he was satisfied with the work, plumbing and all.

Ald. Hawkins refused to go on the stand, saying the insinuations of the engineer could be taken for what they were worth.

It was then moved by a member of the board, that Joseph Muir be asked to inspect the plumbing. This brought out the fact that Mr. Muir and nearly every Halifax plumber had been asked to inspect the plumbing, but had all refused. The board at last asked George Longard to inspect the plumbing and report at next meeting.

HALIFAX PLUMBING FIRM'S STORE.

Farquhar Bros., Halifax, have opened their new store at Blowers and Barrington streets. The building is a credit to the firm and an ornament to the street. It is four stories high, constructed of brick with freestone facings. The fronts on Blowers and Barrington streets are of pressed brick. The store has three large plate glass windows with oval door at the corner. The pipe work department is located in the basement. The retail store is located on the first floor. It is 36 feet wide and 46 feet long. The ceiling is finished in oiled white wood, done in panels. The office, located in the western end of the shop, is fitted with everything modern. A winding staircase leads from the first floor to the other departments. The showroom is on the second floor. It contains a large quantity of first-class goods, including stoves of the latest patterns and designs, plumbing goods, gas fittings, refrigerators, etc.

The tinsmith and plumbing department is on the third floor, employing about 20 hands.

The gas-fitters' department takes in the whole of the upper storey. The firm makes all its own gas-fittings, and has the latest and most modern machinery.

The firm is composed of Robert and James Farquhar. James has charge of the gas-fitting department and Robert the tinsmith and plumbing. Both are enterprising young men; they commenced business in 1890, in the store on Barrington near the old Mason Hall, and soon controlled a large trade. Their business increased to such an extent that they were obliged to erect another building, which is a credit to the firm. The roof of the new building is absolutely fireproof. It is so constructed that it can be covered with six inches of water, which can be carried down a pipe at the centre of the building, leading to the drain. Through this pipe the roof is drained. The building is fitted with a first-class elevator.

HINTS ON VENTILATION AND HEATING.

MRS. ALICE P. NORTON recently gave a talk at the Women's Educational and Industrial Union School of Housekeeping, at Boston, Mass. Her subject was "Ventilation and Heating," and many housekeepers and others interested in this plan to study the vexed question of domestic service were present. In considering that which has come to be counted among the lost arts, the ventilation of the modern house, Mrs. Norton said that few patent arrangements are better than a piece of board so placed that the window sash will not shut down. This admits air into the room, but the most sensitive person cannot feel it. Few persons, said the lecturer, comprehend the simple fact that a window dropped just a trifle from the top on each side of a room or hall will change the air, whereas if several are opened wide the sudden cold makes their closing necessary before any air has a chance to enter. Open fire places are inadequate and inexpensive as heaters, but they are good ventilators, especially if they are constructed with that aim. Steam and hot water heating have disadvantages unless the heat is carried into rooms indirectly, whereas a furnace properly constructed and intelligently managed, should not cause any unhealthfulness.

"The great trouble is," said Mrs. Norton, "that we do not supply enough pure air to the furnace, but depend on actual heat from the fire. Put a thermometer down the register and see if you are not surprised at the way it runs up. The cold air box should be well constructed, and as far from the ground as possible, so that no cellar air nor combustible products are carried to the upper parts of the dwelling. A good supply of heat in the halls produces better results than if the rooms only are heated, as the entire temperature then becomes equalized. Rooms well ventilated will heat more quickly than stuffy ones. Members of the family who complain of cold apartments are always the ones who dislike to admit fresh air. Most rooms are kept too hot. The glass should never be allowed to go above 70 degrees, and lower than that is desirable for the average person. As age comes on the body requires more warmth, while children thrive in a low temperature. It is not an uncommon thing for church furnaces to take air from the audience room that has been breathed and heated again, as the plan of providing outside air is considered as too expensive."

Live within your income; you can be frugal without being niggardly, saving without being miserly.

Christmas Advertising

Make it pay by using some or all of the cuts on this page.



NO. 1—ONE COL. WIDE



NO. 2



NO. 3



NO. 4



NO. 5—TWO COLS. WIDE

Prices:

- No. 1.—Single col. size, \$1.00;
Double col. size, \$1.50.
Nos. 2, 3 and 4.—Price, 90c. each.
No. 5.—Single col. size, \$1.00;
Double col. size, \$1.50.

Either of these cuts in any of the above sizes will be mailed same day as order received, on receipt of price, postage prepaid.

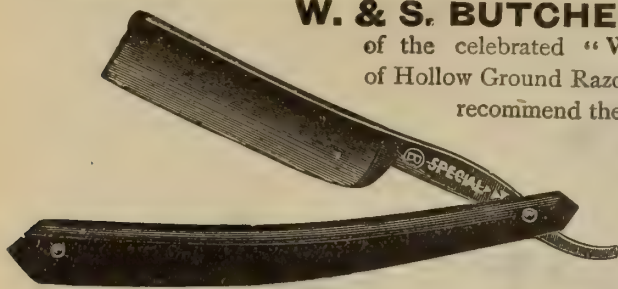
The MacLean Pub. Co.
LIMITED.

TORONTO, ONT.

W. & S. BUTCHER, Sheffield, England, Makers for over **ONE HUNDRED YEARS** of the celebrated "**WADE & BUTCHER**" Razors, and the Original Manufacturers of Hollow Ground Razors, can with confidence highly

recommend their goods and particularly their

Brand as being the most perfect **Extra Hollow Ground** Razors ever manufactured and especially suited for the use of Barbers and for private use. Genuine Razors are marked with one of the following Corporate Trade marks:

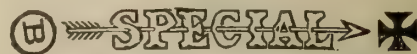


**WADE & BUTCHER,
SHEFFIELD, ENGLAND.**

OR



OR



FOR SALE BY ALL DEALERS IN HARDWARE, CUTLERY and FANCY GOODS

JAMES HUTTON & CO., Agents, - - **Montreal**

CURRENT MARKET QUOTATIONS.

TORONTO, Dec. 10, 1897.

These prices are for such quantities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits

Tin Plates.

Charcoal Plates—Bright.

L.S., equal to Bradley. Per box. \$5 00
I.C., usual sizes

J. R. & Co.—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50

Raven & P. D. Grades—
I.C., usual sizes

D.C., 12"x17

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—
I.C., usual sizes

Dean or J. G. Grade—
I.C., 20x28, 112 sheets

Cookley Grade—
X.X., 14x56, 50 sheet bxs

Tinned Sheets.
26 "

Iron and Steel.
Common Bar, per 100 lbs

Refined
Horse Shoe

Band

Boiler Rivets

Boiler Tubes.
1 1/2-inch

Steel Boiler Plate.
3-16 inch

3/8 inch and thicker..... 1 75

Sheet Iron.

16 gauge and heavier..... 2 50 2 70
18 to 20 gauge

Canada Plates.
All dull, 52 sheets

Iron Pipe.
Wrought, 1/4 to 3/8 inch, \$2.00; 1/2 inch, \$2.35;

Galvanized, 1/2 inch \$4 to \$4.25, 3/4 inch \$4.80 to \$5, 1 inch \$6.75 to \$7, 1 1/4 inch \$9.25 to \$9.62 1/2, 1 1/2 inch \$11.75 to \$12.25 per 100 feet.

Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots: Per lb. 0 03 1/2

Chain.
Proof Coil, 3-16 in., per 100 lbs 5 50 6 00

Copper.
English B. S., ton lots

Cut lengths, round, 1/2 to 7/8 in. round and square 1 to 2 inches. 0 18 0 19

NOTE.—Complete, lengths about 15 feet from 3 to 5 cents a pound.

Untinned, 14 oz., and light, 16 oz., 14x48 and 14x60

NOTE.—Extra for tinning, 2 cents per pound, and tinning and half planishing 3 cents per pound.

Plain Tinned, per lb

Brass.
Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c. off list.

Wire.
Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.

From 20 gauge up, 12 1/2 p. c. off list.

Drop Black, pure

Chrome Yellows, pure

Chrome Greens, pure, per lb. 0 12

Gold Ochre

Foreign, per lb. 0 04 3/4 0 05
Domestic

5 cwt. casks

Imported Pig, per lb. 0 04
Domestic, per lb. 0 03 1/2

Sheets, 2 1/2 lbs. sq. ft., by roll. 0 05 1/2 0 06
Sheets, 3 to 6 lbs., per sq. ft., by roll. 0 05 0 05 1/2

NOTE.—Cut sheets 1/2 cent per lb. extra. Pipe, by the roll, usual weights per yard, lists at 7 cents per lb. and 27 1/2 per cent. discount.

NOTE.—Cut lengths, net price, waste pipe in 8-ft. lengths, lists at 7 1/2 cents.

Bar half-and-half

Wire

Cookson's, per lb. 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

"Beaver" brand

"Tandem" A

White Lead.
Pure, Assoc. guarantee, ground in oil, 25 lb. irons

No. 1 do

No. 2 do

No. 3 do

Prepared Paints.
(In 1/4, 1/2 and 1 gallon tins.)

Pure, per gallon. 1 00
Second qualities, per gallon. 0 90

Barn (in bbls.)

Sherwin-Williams

Colors in Oil.
(25 lb. tins, Standard Quality.)

Venetian Red, per lb. 0 05
Chrome Yellow

Golden Ochre

French

Ultra marine Blue in 28-lb. boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00

Genuine Eng. Litharge, per lb. 0 07
Mortar Color, per 100 lb. 1 25

James' Gen. Red Lead, 100 lb. 0 04 1/2
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lbs. 0 50

Paris Green.
Casks

50-100 lb. kegs

25-lb. Irons

Sulphate of Copper.
Casks, for spraying, per lb. 0 04 1/2
100-lb. cases, do. per lb. 0 05

Putty.
Bladder in bbls., per 100

Bulk

100-lb. cases (tins) per 100

Varnishes.
(In bbls.) per gal.

Carriage, No. 1

Extra do. 2 50

Body Varnish

Furniture Varnish

Extra do. 0 90

Demar Varnish

Hard Oil Finish

Orange Shellac Varnish

White Shellac

Rubbing Varnish

Polishing Varnish

Linseed Oil.
Raw, per gal. net. 0 42 0 43
Boiled, per gal. net. 0 45 0 46

Outside points 2c. more than above figures.

Turpentine.
1 to 4 barrels, net. 0 48
Outside points 2c. more.

Castor Oil.
In cases, per lb. 0 10
Small lots:

Cod Oil, Etc.
Cod Oil, per gal. 0 50 0 55
Pure Olive

Neatsfoot

Glue.
(In bbls.)

Common

French Medal

Cabinet, sheet

White, extra

Gelatine

Strip

Coopers

Al clear

Liquid Glue—F. LePage's, discount 20 to 25 per cent off list; Munn's, discount 25 to 30 per cent. off list.

HARDWARE.

Ammunition.

Cartridges.

B. B. Caps, Dom., 50 and 5 per cent.

Rim Fire Pistol, dis. 45 p. c., Amer.

Rim Fire Cartridges, Dom., 50 and 5 p. c.

Rim Fire, Military, net list, Amer.

Central Fire Pistol and Rifle, 18 per cent.

Amer.

Central Fire Cartridges, pistol sizes, Dom.

30 per cent.

Central Fire Cartridges, Sporting and Military, Dom., 15 and 5 per cent.

Central Fire, Military and Sporting, Amer., net list. B. B. Caps, discount 45 per cent., Amer.

Loaded and empty Shells, "Trap and "Dominion" grades, 25 per cent. Rival and Nitro, 17 p. c.

Shot.

Canadian, common, 12 1/2 per cent.

Brass Shot Shells, 55 and 10 per cent

Primers, Dom., 30 per cent.

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.		0 10	0 12½
Per lb.....			
Anvil and Vice combined, each.....	4 50		
Wilkinson & Co.'s Anvils, lb. 0 09	0 09½		
Wilkinson & Co.'s Vices, lb. 0 09	0 10		

Augers.			
Gilmour's, discount 65 p.c. off revised list.			
Hollow Stearns, per dozen.....	13 00	20 00	
Adjustable Stearns's, each.....	4 50	6 50	
Post-hole, Vaughan's, each.....	1 35	1 60	
Excelsior, Jennings's, discount 50 per cent.			

Awls.			
Sewing, per gross.....	0 65	1 59	
Pegging, ".....	0 65	1 25	
Brad, ".....	0 85	1 60	
" handled, per gross.....	3 60	30	
Saddler's, per gross.....	0 45	1 60	

Awl Hafts.			
Patent Peg, oss.....	7 25	8 00	
" Sewing, per gross.....			

Awl and Tool Sets.			
Millar's Falls, per doz.....	2 90	3 30	

AXES.			
Splitting Axes.....	5 25	5 50	
Chopping Axes.....			
Black Prince.....	7 25	7 50	
Forest Clipper.....	7 25	7 50	
Lance.....	8 50	9 00	
Mann's.....	8 00	8 25	
Maple Leaf.....	9 50	10 00	
Hand Made.....	7 50	7 75	
Climax.....	8 00	8 25	
Phantom.....	8 25	8 50	

Axle Grease.			
Per gross.....	6 00	13 00	

Bath Tubs.			
Zinc, discount.....	3 90	4 0	
Copper, discount, 40 and 10 p.c. off revised list.			
Steel clad, 20 per cent. discount off revised list.			

Boxing extra			
Bells.			
Hand.			
Brass, 60 per cent.			
Nickel, 55 per cent.			

Door.			
Gon Sargent's.....	5 50	8	
" Peterboro', discount 50 per cent.			

Cow.			
American make, discount 66½ per cent.			
Canadian, discount 45 and 50 per cent.			

Farm.			
American, each.....	1 25	3 00	

House.			
American, per lb.....	0 35	0 40	

Bellows.			
Hand, per doz.....	3 35	4 75	
Moulders, per doz.....	7 50	10 00	
Blacksmiths, discount 60 per cent.			

Belting.			
Extra, 40 and 10 per cent.			
No. 1, leather, discount 60 per cent.			
Standard, 55 per cent.			
Agricultural, 65 and 5 p.c.			

Bench Stops.			
Per doz.....	5 00	6 00	

Bits.			
Auger.			

Gilmour's, discount 65 and 5 per cent.			
Excelsior, discount 60 per cent.			
Rockford Common, 70 to 70 and 10 per cent.			
" Perfection, 50 and 10 per cent.			
Jennings' Gen., net list to 5 p.c. discount.			

Car.			
Gilmour's, 47½ to 50 per cent.			

Expansive.			
Clark's, per cent.			
Excelsior, 10 per cent.			

Gimlet.			
Clark's, per doz.....	0 65	0 90	
Diamond, Shell, per doz.....	1 00	1 50	
Nail and Spike per gross.....	2 25	5 20	

Blind Rollers.			
Annex, per doz.....	1 25	1 75	
Mascott, ".....	1 35	1 85	
Erminie, ".....	1 00	0 00	

Blind and Bed Staples.			
sizes, per lb.....	0 7¼	0 12	

Bolts.			
Carriage, dis., 60 and 10 to 70 p.c. off new list			
Tire, dis., 70 and 5 per cent.			
Stove dis., 70 per cent.			
Elevator, dis., 35 to 40 per cent			
Machine, dis., 70 p.c.			
Coach Screws, dis. 80 p.c.			

Boring Machines.			
Complete, with augers, each.....	5 00	7 50	

Braces.			
Barber's.....	6 00	7 75	
Barber's Ratchet.....	10 00	11 00	
Farmers.....	2 00	2 75	
Millar's Falls.....	15 50	29 00	

Brackets.			
Shelf.			
Japanned Canadian, per doz.			
pairs.....	0 50	3 40	
Berlin Bronze Canadian.....	0 85	3 20	

Broilers.			
Light, dis., 65 to 67½ per cent.			
Reversible, dis., 65 to 67½ per cent.			
Vegetable, per doz., dis. 37½ per cent.			
Henis, No. 8, ".....	6 00		
Henis, No. 9, ".....	7 00		
Queen City ".....	7 50	10 00	

Butchers' Cleavers.			
From 8 to ch, per doz.....	4 23		

Butts.			
Brass.			
Wrought Brass, dis., 17½ p.c. revised list.			
Cast Iron.			
Loose Pin, dis. 70 per cent.			

Wrought Steel.			
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.			
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.			
Berlin Bronzed, dis. 70, 70 and 5 per cent.			
Gen. Bronzed, per pair.....	0 40	0 65	

Can Openers.			
Acme, per gross.....	9 00	10 00	
Sardine Scissors, per doz.....	3 75	4 50	

Card.			
Horse, per do.....	0 60	1 00	

Carpet Stretchers.			
American, per doz.....	1 00	50	
Bullards, per doz.....	6 50		

Carpet Sweepers.			
Bissell, per doz.....	22 50		
World, ".....	21 75		
Daisy, ".....	24 00		
Star.....	18 00		
Crown Jewel, per doz.....	29 00		
Grand Rapids, ".....	24 00	33 00	

Cartridges.			
(See Ammunition.)			

Castors.			
Bed new list, dis. 55 to 57½ per cent.			
Plate, dis. 52½ to 57½ per cent.			

Cattle Leaders.			
Nos. 31 and 32, per gross.....	8 50	9 50	

Cement.			
Canadian, Portland.....	2 50		
English.....	2 50		
Belgium.....	2 35		
Canadian hydraulic.....	1 10		
Figures are for barrel lots.			

Chalk.			
Carpenters' Colored, per gross.....	0 45	0 75	
White lump, per cwt.....	0 60	0 65	
Red.....	0 05	0 06	
Crayon, per gross.....	0 14	0 18	

Chisels.			
Socket, Framing and Firmer.			
American, dis. 75 to 77½ per cent.			
Canadian, dis. 50 and 10 per cent.			
Tanged firmer, per doz.....	0 85	4 00	

Churns.			
Daisy or Leader, dis. from stock or factory			
60, 10 and 5 per cent.			
Steel, net.....	3 00		

Clamps.			
Judd's, dis. 20 per cent.			
stearns, per doz.....	3 00	10 00	

Clips.			
Axle dis. 65 per cent.			

Coffee Mills.			
Box.....	3 60	13 00	
Side.....	3 60	4 00	
Enterprise, No. 0.....	1 35		
" No. 2.....	70		

Compasses, Dividers, Etc.			
American, dis. 62½ to 65 pe cent			

Cradles, Grain.			
Canadian dis. 25 per cent.			
Dies.			
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.			
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.			

Door Springs.			
Torrey's Rod, per doz..... (15 p.c.)	2 00		
Coil, per doz.....	1 60		
English per doz.....	2 90	4 00	

Draw Knives.			
American, dis. 70 and 10 per cent.			
Canadian, dis. 25, 50 and 10 per cent.			

Drills.			
Hand and Breast.			
Millar Falls, per doz.....	16 00	51 50	
P. S. & W., dis. 40 per cent.			

DRILL BIT.			
Morse, dis. 37½ to 50 and 5 to 65 per cent.			
Standard, dis. 40 per cent.			

ELBOWS.			
Stovepipe.			
Per doz.....	85	1 70	

Enameline.			
No. 4—3 dozen in case.....	\$4 50		
No. 6—3 dozen in case.....	7 50		



FAWCETS.			
Cork Lined, per doz.....	0 30	0 35	
Wine, per doz.....	1 30	3 25	
Star.....	2 80	3 90	
Fenn's Corkstops, No. 2, per dozen.....	1 70		
Petroleum, per doz.....	4 50	6 50	

FILES AND RASPS.			
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.			
Black Diamond, 50 and 10 to 60 per cent.			
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.			
Nicholson File Co., 50 and 10 to 60 per cent.			
Heller's Horse Rasps, 50 to 50 and 5 per cent.			
Jowitt's, English list, 25 to 27½ per cent.			
American, 60 to 60 and 5 per cent.			
Great Western, 60 and 10 per cent.			

FLUTING MACHINES.			
Each.....	0 60	2 00	

FORKS.			
Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.			

FREEZERS			
Ice Cream.			
Gem from \$1.25 to \$7 net.			
White Mountain, dis. 50 p.c.			
Arctic, dis. 50 p.c.			

FRUIT PRESSES.			
Henis, per doz.....	3 25	3 50	
Enterprise, dis. 10 per cent.			
Shepard's Queen City, dis. 15 per cent.			

FRY PANS.			
Acme, dis. 65 to 67½ per cent.			

GAUGES.			
Marking, Mortise, Etc.			
Stanley's, dis. 50 to 55 per cent.			
Wire Gauges.			
Winn's, Nos. 26 to 33, each.....	1 65	2 40	

GLASS.			
Window.			
Box Price.			

KNIVES.		Bailey's (Stan. R. & L. Co.) 50 to 50 and 5 p.c.		SCALES.		Leather carpet tacks, black and tinned	
Clauss, bread, cake, and paring knives, \$7.00 doz. sets net to 10 per cent.		Miscellaneous, dis. 25 to 37½ per cent.		Gurney Scales, 50 p.c.		Trunk nails, black and tinned	
Christie, \$7.00 net.		Bailey's Victor, 25 per cent		B. S. & M. Scales, 50 p.c.		Clout nails	
Hay knives, spear point, Lor T handle, 60 to 60 and 10 per cent.				Champion 60 per cent		Cigar box nails	
Lightning, per doz.....		6 50 8 40		SCRAPERS		Lining nails in papers	
Heath's, 52½ p.c.				Box, per doz.....		" " in bulk	
LADLES.				Boot, " " " "		" " solid heads, in bulk	
Melting, per doz.....		1 70 4 50		SCREENS.		Saddle nails in papers	
LEMON SQUEEZERS.				Window, patent, per doz....		Tinned capped trunk nails	
Porcelain lined, per doz.....		2 20 5 60		Door, per doz.....		Double pointed tacks, discount 80 p.c.	
Galvanized, " " " "		1 87 3 85		SCREW DRIVERS.		TAPE LINES.	
King, wood, " " " "		2 75 2 90		Sargent's per doz.....		English, ass skin, per doz ...	
" glass, " " " "		4 00 4 50		0 65 4 00		English, Patent Leather ...	
A glass, " " " "		1 20 1 30		SCREWS.		Chesterman's, each ...	
LINES.				Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.		" steel, each ...	
Fish, per gross.....		1 05 2 50		Wood, R. H., " dis. 80 and 10 p.c.		THERMOMETERS.	
Chalk, " " " "		1 90 7 40		" F. H., brass, dis. 82½ and 10 p.c.		Tin case and dairy, dis. 75 to 75 and 10 p. c.	
LOCKS.				" R. H., " dis. 75 and 10 p.c.		THIMBLES.	
Canadian, dis. 50 p.c.				Drive Screws, 87½ and 10 per cent.		Asbestos, filled, per doz., 35 to 40 p. c.	
Russell & Erwin, per doz.....		1 75 7 50		Bench, wood, per doz.....		TIES.	
Cabinet,				iron, " " " "		Cow, per doz ...	
Eagle, dis. 30 p.c.				SCYTHES.		TINNERS' TOOLS.	
Padlock.				Discount, 60 and 10 p.c. revised list.		P. S. & W., 10 p. c.	
English and Am., per doz....		0 50 6 00		SCYTHE SNATHS.		Canadian, 35 to 37½ per cent.	
Scandinavian, " " " "		1 00 2 40		Canadian, dis. 45 to 50 p.c.		TINWARE.	
Eagle, dis. 15 to 17½ p.c.				SHEARS		Stamped, dis., Assen. list, 80 and 10 per cent.	
MACHINE SCREWS.				B. & W., japanned, dis. 75 p.c.		Japanned, prices on application	
Iron and Brass.				B. & W., N.P., dis. 65 p.c.		Piced, prices on application.	
Flat head, discount 25 p.c.				Seymour's, dis. 60 p.c.		CALKS (Steel)	
Round Head, discount 20 p.c.				Etna, dis. 75 to 75 and 10 p.c.		Toe calks, per M. net ...	
MAGNOLIA METAL, ETC.				Heinisch, dis. 60 p.c.		" "	

**PEARSON'S
PATENT**

Cone Rotary Ventilator



For Bally Chimneys, ventilating Churches, Schools, Factories, etc. Substantial in make, ornamental in appearance. Made in sizes from 2½ to 48 inches.

The Montreal Roofing Co.

Sole Manufacturers for the Dominion, Montreal

CHARLES F. CLARK,
President.

J. CHITTENDEN,
Treasurer

ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

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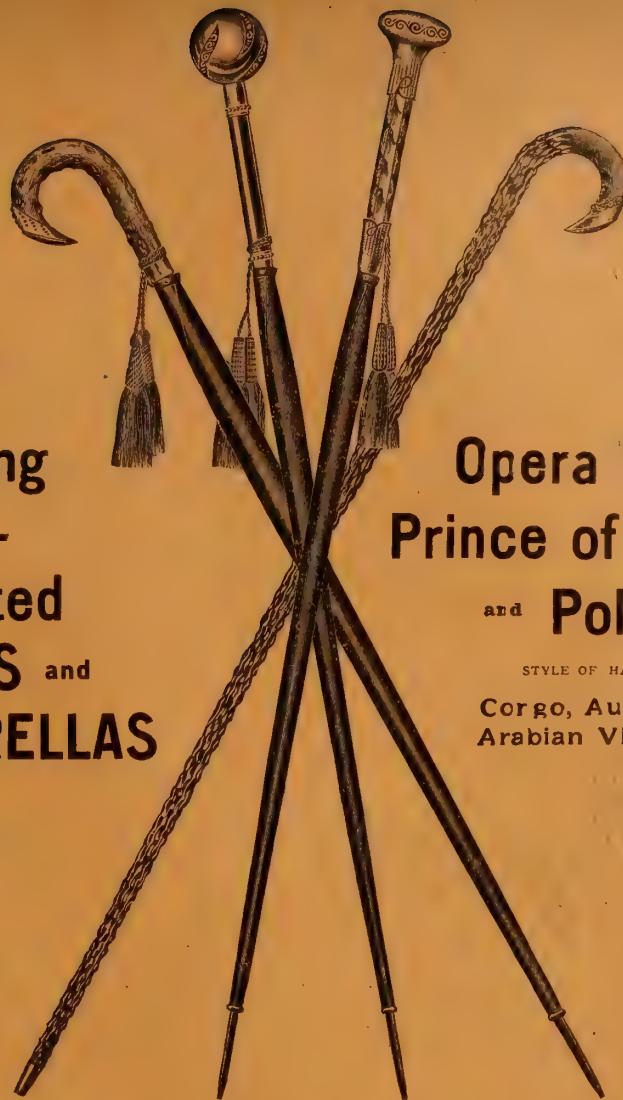
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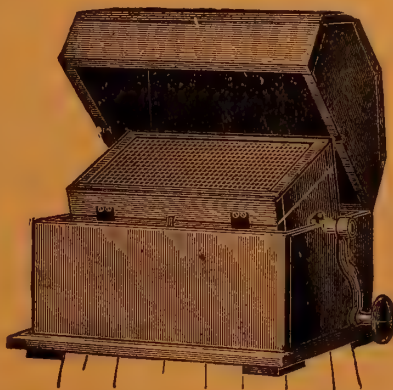
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VOL. IX

MONTREAL AND TORONTO, DECEMBER 18, 1897

No. 51



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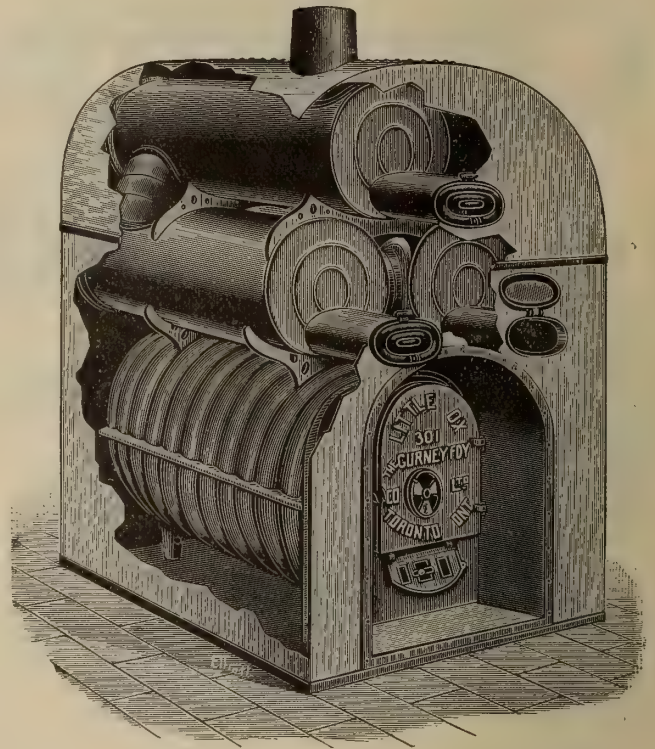
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A QUESTION OF LAW.

THERE is a strong possibility of litigation over the delayed cargo ex the steamer Boston City which was landed at Halifax.

It was originally intended that this vessel should deliver her goods at Montreal, but circumstances prevented this, and shippers have not only been put to inconvenience, and in some cases loss, but before they could get their goods released had to sign a general average bond.

It appears that the delay was caused by the steamer grounding when leaving the other side of the Atlantic, delaying her until it was too late to proceed to Montreal. The fact of the grounding rendered a marine survey a possibility. This necessitated signing the general average bond above men-

tioned, and besides in several cases consignees had to put up 10 per cent. of the value of their shipments before they were released. Finally, to cap the climax, they had to pay the freight charges from Halifax to Montreal and other points of destination.

It is not surprising, considering all these circumstances, that there should be dissatisfaction, for the importers contend that there was nothing in the freight contract that relieved the steamship people from liability. They hold that the latter were bound to deliver the goods in Montreal, as they knew very well that the date was late and that there was a chance of their arriving too late for safe navigation.

The shippers believe that they have a case, for at a meeting held in Montreal Messrs. Wm. McNally, Chas. Byrd, D. Masson, G. De Sola and R. L. Dillon, were appointed a committee to secure legal advice in the matter.

The steamship people laugh at this, claiming that as common carriers they came under the Act governing such, and that it is therein provided that they shall not be liable for an act of Providence, under which the case in question, in their opinion, clearly comes.

This is a point that the courts will no doubt have a chance of deciding. In the meantime the extra freight and the 10 per cent. for general average, cuts down margins considerably.

A contemporary dilates on the question, "How to live a century." What troubles most people is how they are going to live the allotted three-score and ten years.

THAT WIRE CONSOLIDATION.

Nothing definite is yet known in regard to the consummation of the proposed wire nail consolidation in the United States.

It is the general opinion the scheme will be carried out, yet there is "many a slip 'twixt the cup and the lip," and the realization of this fact is causing some uncertainty in Canada, for if the American Wire and Steel Co., with a capital of \$70,000,000, becomes an actuality it will likely mean higher prices in this country.

Manufacturers of wire nails and other articles into which wire enters in the making are, therefore, watching carefully for future developments in the great consolidation movement.

The young man who zealously guards the moments shall in his latter days have affluence and hours of ease.

REDUCTION IN TINNED IRON.

Jobbers' quotations on tinned iron are a quarter of a cent per pound lower than they were a week ago.

The ruling figures are now: 24 gauge, 5¼ to 6c.; 26 gauge, 6¼ to 6½c.; 28 gauge, 7 to 7¼c.

Business is small, it getting late in the season. Orders are, however, being booked for import.

PLUMBING IN THE KLONDYKE.

When the Klondyke becomes settled and modern sanitary appurtenances come into vogue, what a plumbers' paradise it will be when Jack Frost goes on the rampage. Plumbers will then rush there to get gold out of plumbing, and let the earth yield her increase of the precious metal to others.

DRAWBACKS AND THE EXPORT TRADE.

It will be remembered that in November, 1894, an order-in-Council was issued by the Canadian Government granting a drawback of 99 per cent. on imported articles upon proof being adduced that they had entered into the manufacture of an article which had subsequently been exported. The regulation governing this order in-Council reads as follows :

The manufacturer of any article manufactured in Canada, wholly or in part from material of foreign growth, production or manufacture imported thereinto, upon which any duty of Customs has been paid on such importations, may, upon the exportation of such article so manufactured in Canada, unless otherwise provided, and on compliance with such other regulations and restrictions as are herein contained, and are now or may hereafter be made applicable to each or any specific case, be entitled to a drawback of ninety-nine per cent. of the duty paid upon the material of foreign growth, production or manufacture, used and wrought into or attached to the article manufactured in Canada and exported therefrom, provided always that no claim or claims for drawback shall be paid or be payable, unless it or they aggregate the sum of twenty-five dollars, as made or presented at any one time ; and provided further that the material so used as aforesaid shall have been entered at Customs and the duty paid thereon within three years of the date of the exportation of the Canadian manufactured article.

To be entitled to a drawback the manufacturer shall make due export entry of the article or articles so manufactured in Canada and deliver to the Collector of Customs at the port where such export entry is made one of the bills of lading thereof, or a copy of the bill of lading thereof, duly certified as such, and as issued for Canadian Customs purposes only by the agent of the carrier, and a statement showing the distinguishing marks and numbers of the package or packages covered by the entry and the bill of lading, the foreign destination thereof, the number or quantity of contents, the place of manufacture, and unless a specific sum has been authorized as drawback payable, the quantity of the duty paid material used in the manufacture of the article or articles so entered for export, and the amount of duty paid thereon, and shall furnish evidence satisfactory to the Controller of Customs as to when and where the duty was paid, and such further evidence of the bona fides of the importation and exportation as the Controller may under the circumstances of the case deem necessary ; all of which he shall verify under oath in form as per schedule hereto attached.

For a couple of years the provisions embodied in the order-in-Council were practically not taken advantage of. A reference to the list of drawbacks published in the report of the Auditor-General proves this, it there being shown that large manufacturers who were known to import large quantities of raw material as well as export large quantities of finished products only received insignificant sums by way of rebates, while some large firms did not appear in the list at all.

Within quite a recent period this has all changed. The Customs Department is now paying out enormous sums. One manufacturing firm alone in Toronto is estimated to have received something like twenty-five thousand dollars by way of rebates during the past year.

To all who peruse the Trade and Navigation Returns the growth which has taken place in the exports of manufactured goods in Canada is well known. The increase in the drawbacks being given is a corroboration of the information given in the trade returns. The exports of manufactured goods from Canada for the five months ending October 31st last were valued at \$4,399,945, compared with \$3,995,324 the same period last year, an increase of nearly 10 per cent.

One man is kept constantly employed at the Toronto office checking over the claims for rebates, and his duties have become so onerous that it will be necessary to put on an additional checker if the rebates continue to multiply. All the checking, it might be mentioned, is done at Toronto.

The manufacturers of agricultural implements and bicycles are exporting large quantities of their products. The other descriptions of manufactured goods which are exporting largely are : Carriage tops and dashes, organs, pianos and musical instruments generally, bicycles, boots and shoes, type-writers, sawing machines, portable steam engines, saw mills, pulp mill machinery, traction engines. The distillers are receiving enormous drawbacks on the bottles, corks, capsules, etc., showing that Canadian whiskies are also sharing in the increased export trade.

The present method of making out claims is very intricate, and demands a great deal of the time of both the firms who make them and the Customs Department, which receive them, but the Customs authorities declare that greater simplicity is not possible under the circumstances.

BUSINESS IN BOWMANVILLE.

Mr. A. Tait, of Cawker & Tait, Bowmanville, was in Toronto last week. Mr. Tait was in good spirits over the trade outlook, and particularly in regard to the prospects in his town.

"When the furniture factory was burned down things looked blue, but now the piano and organ factory is busy. and the bicycle rim concern is working overtime to keep up with the orders. The same may be said with regard to the new rubber factory. This rubber factory was bonused by the town to the extent of \$6,000, and it began operations about two months ago. It employs

thirty hands. The year opened up in anything but a promising way. January was particularly bad, but since then there has been a gradual improvement, and the year's trade is much more satisfactory than that of last year."

TORONTO'S HARDWARE CONTRACT.

YEAR after year when the contract for the hardware supply of the city of Toronto is awarded more or less remarks of disapproval at some feature or other in connection therewith are heard. A great many of the remarks, perhaps the most of them, may be unreasonable, but of one thing **HARDWARE AND METAL** is persuaded, the present system should either be reformed or give place to an entirely new one.

Until **HARDWARE AND METAL** a few years ago obtained possession of a copy of the contract awarded a short time before, and published the same, it will be remembered that one firm secured the coveted tender year after year. It was then discovered the secret of the tenderer's success: Knowing from experience just what the corporation used, he quoted a ridiculously low price on such articles as he knew would not come up to specifications, and put in a high figure on such as were morally certain to be wanted in quantities exceeding the specification. In this way he was enabled to present total figures below his competitors for the corporation's supply of hardware.

This may not be done to the extent it formerly was, yet those who are in the habit of tendering declare that it still in some degree obtains, and it is the general opinion that the corporation is, on the whole, year after year, paying more for its hardware than it would if it bought upon the open market.

Such large corporations as the Grand Trunk and the Toronto Railway Co. buy most, if not all, their hardware and metals in the open market. They have buyers whose duty it is to send out to the various firms asking for quotations on a certain quantity of certain articles ; and if these corporations had not found it the most satisfactory method, they would not now be continuing it.

The Corporation of Toronto should give the matter its careful consideration between now and the time it again asks for tenders for hardware supplies.

TO BALK THE INSOLVENCY BILL.

IT is said that a good deal of quiet missionary work is being done among members of Parliament by those who are opposed to a Dominion insolvency law, and that as a result several members on both sides of the House have promised to take a negative position. It is, in fact, said that a sufficient number of anti-insolvency members has been secured to ensure the defeat of the proposed bill when it is brought up.

While it is to be regretted that any preconcerted action is being taken to deprive the country of that which it so obviously needs, yet those who are opposed to an insolvency law on legitimate grounds are perfectly right in doing all they can to secure the defeat of the measure. But while this is so, it is none the less obvious that the champions of the bill should be on the quiver as well.

If there is to be an insolvency law there is no time for those who favor it to slumber and sleep. There must be a more vigorous awakening to action than there is at the moment apparent if the desideratum is to be secured.

There is no question about the necessity of such a law. People may prate about a better credit system being the remedy. A better credit system would undoubtedly do a great deal, but we have not got it, and the ideal is a great way off.

To use the better-credit-system argument against an insolvency law is like declaring there ought to be no law punishing murder, but that all evil disposed persons should be Christianized.

But we are not yet in the millennium either in business or religion. Until we are there is need both for an insolvency law and work for the preacher.

The strongest influence against the last insolvency bill when it was before Parliament was that of the bankers. And their particular opposition was not due to any inherent disbelief in the principles of an insolvency law. It was due to an inherent belief that a banker should have double the security of any other class of creditor. This the last bill did not purpose doing, hence its collapse.

The necessity of an insolvency law is so obvious that we cannot understand how any

man who has given the matter thoughtful attention can conscientiously oppose it.

It is wanted for the debtor class as well as for the creditor class. An honest debtor has certainly no reason to fear it. On the contrary, he has every reason to welcome it, for if perchance he should become an insolvent, a way of escape would be assured him after he had done all he could to meet his indebtedness, for all are agreed that an insolvency law without a discharge clause cannot be. It is only the dishonest debtor that will have reason to fear and tremble.

There is no dearth of reasons why an insolvency law should exist. Every man whose business ramifications extend to more than one province has been made to realize its necessity time and again. Had the provinces suitable laws there would not be the same necessity for action by the House of Commons. But the powers of the several provinces are very limited in this respect, and the little the most of them have done has been woefully short of even what it might have been.

What is wanted is a uniform law: a law which covers the provinces from the Atlantic to the Pacific. And the Parliament of Canada is the only body which can supply such a law.

Next to our own interests there are the interests of those in Great Britain who sell us goods. Because of the absence of an insolvency law a great many on the other side of the Atlantic are deterred from pushing business in Canada. In other words, the absence of an insolvency law is giving the Dominion a bad character among the mercantile classes in the Motherland. And people who are cautious in selling to us are not likely to be liberal in buying from us. An insolvency law is therefore necessary in order that the mercantile community in Canada may enjoy in Great Britain something at least approaching that high standing which does the credit of the Dominion among the financial men there.

Then something certainly needs to be done for the honest but unfortunate insolvent. There is no reason why he, through purely unfortunate circumstances over which he had no control, should be under a ban for the remainder of his days.

But while a law is needed for the protection of an honest but unfortunate insolvent against creditors who may not have the necessary quality of mercy to grant him a discharge, yet a law is also wanted which will sufficiently lengthen and strengthen the arm of justice that it may reach after and punish those business men who are obviously dishonest.

There is much in the insolvency law

cause to inspire sympathy and co-operation, and it is to be hoped they will not be withheld, but will be employed from now till the battle is won, for an insolvency law must come sooner or later.

OTTAWA'S LUMBER CUT.

REPORTS received from the various lumber manufacturers of the Ottawa Valley go to show that the season just closed was a very fair one with them in comparison with the last few years.

Although there was a good deal of unsettled feeling owing to the American tariff, which caused a dulness in trade that was even accentuated by a poor demand for Canadian lumber from the West Indies and South America, yet this was fully compensated for by a good, strong, active market, and good prices obtained for Canadian lumber and timber in the British Isles, so that to-day there is probably a much less amount in value of lumber remaining in this district unsold than there has been for several years past.

As to the future prospects, it is learned that they are brighter than for some years at this period. The demand in Great Britain still continues good, and already Buell, Hurdman & Co. have sold their cut for next year at prices reported to be fully equal to those of last season. This one sale, it is said, will fix, to a very large extent, the prices of all the deals and better grades of lumber for the British market in this district.

It is understood that several British market purchasers have closed for their usual lots, and it is safe to say that all the deals which may be cut in the Ottawa Valley next season are practically closed for by the same parties as bought them this year.

An estimate of the cut in the valley during the season puts it at about 728,000,000 feet, which is somewhat more than last year, the increase being due to heavier cuts by the St. Anthony Lumber Co. and several other manufacturers. The estimated cuts are as follows:

	Feet.
J. R. Booth.....	130,000,000
McLachlan Bros., Arnprior.....	70,000,000
St. Anthony Co., Whitney.....	70,000,000
Buell, Hurdman & Co.....	60,000,000
Hawkesbury Lumber Co.....	55,000,000
Gilmour & Co., Canoe Lake.....	55,000,000
Bronson & Weston.....	50,000,000
W. C. Edwards, Rockland.....	50,000,000
Gilmour & Hughson, Hull.....	40,000,000
Gillies Bros., Braeside.....	30,000,000
Shepard & Morse, New Edinburgh.....	18,000,000
Pembroke Lumber Co.....	15,000,000
Klock Bros., Aylmer.....	14,000,000
Canada Lumber Co., Carleton Place...	12,000,000
William Mason & Sons.....	12,000,000
Conroy Bros., Deschenes.....	12,000,000
James MacLaren, Buckingham.....	12,000,000
Ottawa Lumber Co., Calumet.....	11,000,000
Hogan's Mill, Plantagenet.....	5,000,000
Gillies Bros., Sand Point.....	3,000,000
A. P. White, Pembroke.....	4,000,000
Total cut.....	728,000,000

THE EDMONTON ROUTE TO THE KLONDYKE.

By C. L. S.

NOT long ago the Board of Trade of Victoria, B.C., issued a circular complaining that the trade in supplies for the Klondyke was being gobbled up by American merchants who, with their usual promptness and business sagacity, had taken advantage of the rush to the Yukon to monopolize the supply trade. There is no doubt that so long as the West Coast route is used not only the Victoria merchants, but those throughout the entire country will be hampered by our more enterprising neighbors. The gold is ours, but we are willing to share it with all comers; the trade we can have entirely to ourselves if we exercise ordinary business methods.

It is estimated that 500,000 people will go to the Klondyke during the coming spring. The excitement in Great Britain and throughout Europe over our gold fields, in Australia, Africa and the Islands of the Pacific, as well as in the United States, is even greater than in our own country, probably for the reason that distance lends enchantment to the view. When we consider what supplies for such a number of people mean we will begin to realize that the merchants and manufacturers of Eastern Canada have a little Klondyke of their own at home, supplying this vast, hungry multitude. Those who are well informed on the subject say that every man going to Klondyke will have to spend at least \$200 on his food and clothing outfit; so that even if only 200,000 people go at \$200 each it means \$40,000,000—a tidy little sum to be added to Canada's yearly trade. Even supposing that only 100,000 persons take the Edmonton and Calgary route, that would mean \$20,000,000.

It is understood that the Hudson Bay Co. are opposing the Edmonton route* and favoring the Stickeen and Lake Teslin route, as the country to be traversed by pack trail from Edmonton is through their best fur-producing and hunting country, and undoubtedly the horde of miners would frighten the game and drive it further north. The C.P.R., it is believed, is advocating the West Coast route, for the reason that it would give them a longer haul than the Edmonton route.

San Francisco firms are flooding British Columbia with their advertisements of Klondyke supplies and when we take into consideration the advantage they possess over Eastern Canada in the matter of freight rates we may feel sure that Californian merchants will get a fair proportion of the business if trade sets in through the British Columbia route. If, on the contrary, the

Canadian Government can be induced to open up the Edmonton land and water route we shall get it all, as the difference in freight will be sufficiently in our favor to shut out competition from that quarter.

In addition to the enormous quantities of supplies that would have to be purchased in this country, a pack trail from Edmonton will open up a market for Alberta cattle that will be another Bonanza Creek to the ranchmen. Those going by the land route would require pack horses and saddles, and the ranches in the vicinity of Calgary and Edmonton can supply the former at \$15 to \$20 apiece. If the water route is chosen, a highway would be used that has been traveled for years by the Hudson Bay Co. and private traders, and that is well known to hundreds of men in that district whose services could be secured as guides. Boat-builders are ready at Athabasca Landing to build boats at reasonable figures.

The pack trail route, which it should be the prime object of all eastern business men to induce the Government to build, has this to commend it to the miner which the water route does not possess, viz., it passes through the greatest number of gold-bearing streams on the road to the Yukon. Not only this, but in the vicinity of Edmonton and on the line of railway is a farming community who harvested this year nearly 3,000,000 bushels of grain, and who would find a market for their produce amongst the miners. This alone would be reason enough to favor the Edmonton route.

Leaving Edmonton with pack horses and travoise or flat sleds (whichever was decided upon) the miner would go out nine miles to St. Albert, and from thence along a beaten wagon road to Lake St. Ann, a distance of 40 miles. Here he could either go round the lake in an easterly direction or cross at the narrows. Proceeding in a north-westerly direction about 18 miles, he comes to the crossing of the Pembina River, 37 miles further on he comes to the Athabasca River, crossing it at the junction of the McLeod. Going onward in a north-westerly direction between Hawk Creek and Burnt Wood Creek, 20 miles, he crosses a branch of Hawk Creek and then a branch of the Burnt Wood. He then proceeds nearly due west, along the chain of lakes about 70 miles, and turning northward for about 25 miles he comes to the narrows of Sturgeon Lake. From Sturgeon Lake to the crossing of the Smoky River is 30 miles, and from there to Fort St. John is 120 miles more. From Edmonton to Fort St. John the miner has traversed what can be made into a first-class road, and which it is to be

hoped the Government will cut out and make without further delay. A great many prospectors have traveled this road during the present fall, but no one has found the road bad. Of course there are creeks to be bridged and swamps to be corduroyed, scows to be built at the crossings of the larger rivers, and fallen timber to be removed; but apart from these improvements, which are necessary with every new road, there are no physical difficulties, as the country is in general level.

At Fort St. John begins the uncertainty; but we have the following data to show that a passable trail exists:

(1) Mr. Ogilvie on his way south from Nelson saw well defined, and in some instances well-beaten, horse trails going in different directions. (2) Wm. Cust, who mine in the district north of the Peace River, speaks of a horse trail in that country. (3) Mr. McConnell, in his report on that section of the country, speaks of Indians going north on horseback. (4) Mr. Ogilvie, in his report of the survey of the Dease, speaks of a horse trail going about 90 miles east in that direction. (5) All Hudson Bay traders in that district know that the St. John and other Peace River Indians hunt along the Liard and that they use horses. (6) It is also known that the Beaver Indians, who hunt north of the Peace River, had formerly large numbers of horses. From this data we are right in believing that a good road can be made from St. John on the Peace River to Sylvester's Landing on the Dease, a distance of 360 miles. From Sylvester's Landing to the lower post is 50 miles, from there to Fort Francis 90 miles, and from there to Pelly Banks 75 miles, a distance of 215 miles, which there is every reason to believe may be traveled without a great amount of trouble. Mr. Ogilvie speaks of a wide valley with good grass on the bottom where horses could be pastured; there are no glaciers to be crossed, and the freezing of the rivers helps rather than retards progress; it will be free from congestion, as no amount of traffic can block this road; storms of whatever kind cannot affect the arrival of supplies, and so long as there are horses enough, there will be no fear of any stoppage. While on the West Coast we have the dangers of the sea, the mountain passes and canyons, on this route there are no dangers which cannot be avoided by ordinary good judgment. The rich gold fields along this route make it doubly desirable; every stream crossed bears gold, the Pembina, the Athabasca, the Smoky, Dease, Findlay and Omenica have all proved rich enough on the bars to satisfy geologists that the bed rock will be very valuable. The Pelly, which is really the headwaters of the Yukon, is as rich, if not richer, than that

*See map illustrating the route on pages 18 and 19.

water itself. South of the Peace River is a large tract of country known as La Grande Prairie in which immense droves of cattle could be wintered and fed as well as in Alberta. Then there are large hay meadows where hay could be cut and the miners could be fed on cattle and grain raised within a short distance of the mines.

The Government will some day need this road for colonization purposes, as treaties will have to be made sooner or later with the Northern Indians, for the Peace River country is far too rich to be left to Indians and wild animals.

The water route from Edmonton commences at Athabasca Landing about 96 miles of good road from Edmonton. Freight is carried there from Edmonton for \$20 per ton, and there need be no fear of stoppage, as a large number of teams are ready for hire. At Athabasca Landing boat builders are prepared to build boats suitable for use in the northern waters, and guides may be secured to take parties below the rapids. From Athabasca Landing to Peel River requires very little work, except over the rapids, as the stream flows in the direction the miner wishes to go, at about 6 or 8 miles an hour. From Athabasca Landing to Grand Rapids is 167 miles, and here the difficulties of the trip begin, as the boat has to be let down the rapids by ropes and the goods transported half a mile by land to where the miner can run the rapids. He then follows the course of the stream to Big Cascade; from thence he goes to Fort McMurray, 87 miles, and from Fort McMurray to Fort Chipewyan, a distance of 185 miles, after crossing Lake Athabasca, a distance of about 15 miles. From there to Smith Landing there is no obstruction in the river. A few miles from Fort Chipewyan is the mouth of the Peace River.

On arrival at Smith Landing two courses are open, either to get goods and boat transported by land or to procure a wagon and proceed down the river to Five Portages. The portage from the landing to Fort Smith is 16 miles and then from Fort Smith to Fort Resolution is 194 miles of smooth sailing. Fort Resolution is on Great Slave Lake. From Resolution to Providence is 168 miles, and then, coasting to the south-east end of Great Slave Lake, and passing several small streams whose mouths form safe harbors in case of necessity, we arrive at Big Island, where there is a fishery which will some day be of great commercial importance. Providence to Fort Simpson is 160 miles; Simpson to Rigley, 136 miles; Rigley to Norman, 184 miles; Norman to Good Hope, 174 miles; Good Hope to Peel River, 252 miles. From Simpson to Peel River we have traveled a distance of 800 miles on one of the noblest rivers in the

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world with a width of from one to four miles and a depth, except in one or two places, capable of carrying an ocean steamer of light draught.

With the exception of one place, the whole river as far as Fort Smith is navigable by steamboats drawing from eight to ten feet of water. After descending the Peel River for some 18 miles we enter the Peel River proper. Going on down the Peel we enter the Rat River, and going up it for 30 miles we reach a portage of about three-quarters of a mile and are at the Bell River. Descending the Bell River for some 60 miles we enter the Porcupine; still going down stream 400 miles we strike the Yukon River about 300 miles below Dawson City. If we do not find the yellow metal here, and it is the opinion of many that we will, all we have to do is to turn our faces up stream—for the first time in 2,400 miles, with the exception of 30 miles on the Rat River—put on our best speed and enter the far-famed Klondyke, a distance of 2,700 miles from Edmonton.

A COMMON-SENSED NEGRO.

The Examiner says that once when Chief Justice John Marshall, of the United States, was driving, the hub of his wheel caught on a small sapling growing on the roadside.

After striving unsuccessfully for some moments to extricate the wheel, he heard the sound of an axe in the woods and saw a negro approaching. Hailing him, he said: "If you will get that axe and cut down this tree I'll give you a dollar." "I c'n git yer by 'thout no axe, ef dat' all yer want." "Yes, that's all," said the judge. The man simply backed the horse until the wheel was clear of the sapling, and then brought the vehicle safely around it. "You don't charge a dollar for that, do you?" asked the astonished chief justice. "No, massa, but it's wuf a dollar to larn some folks sense." The quick-witted darky got his dollar without further questioning.

HEADING FOR THE KLONDYKE.

Major Hoffman and Capt. Allegue, two English officers, are registered at the Windsor, Montreal. They are on their way to join a party going to the Klondyke.—Montreal Star.

An expedition, under the leadership of Major Helpman, consisting of 12 members, has left Southampton, Eng., for the Northwest Territories of Canada by the steamship St. Paul. The expedition is composed of practical men, all of repute and social standing in England. They are heading for the Klondyke.—Kingston News.

Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

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is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.



THE CLERK'S STORY.

FOR many years, says a writer in Iron Age, I have toiled for other men. I have stood behind the counter and doled out nails by the pound and made out invoices of goods and posted entries, and counted the cash and collected bills for others.

If, when a boy, when I first began my mercantile life, I had been told that at 50 years of age I would be only a clerk, I would have contradicted the statement. I fully intended some time to own a store of my own, but now I have given up all hope of any such good fortune. My course in the future is fully mapped out that I am to jog along in this same old way until ill health or old age shall compel me to step aside and give place for younger hands than mine. I am not grumbling when I state that life has nothing better for me in the future. I am contented to move in the same old groove year after year and see young fellows 30 years my junior start out as clerks, then open a store of their own and become successful business men.

Perhaps some may think mine a sad case and one calculated to discourage. But it is not. There are other joys than those of making money, and a contented lot with a good conscience is desirable, even although only a gray-haired clerk.

MISTAKES AND EXPERIENCE.

Looking back over the past I can perhaps see where I have made mistakes, and with the knowledge and experience gained by these long years of contact with hard headed men of affairs, I would, were I young again, act differently. I am still strongly impressed with the idea that every young fellow in business should look forward to running a store of his own, or else a partnership in some established firm. How I have failed in reaching this goal of my ambition I will relate to you, as perhaps my failure is not an isolated one.

BEGINNING A CAREER.

At 16 I entered the store of Jackson & Son. I had some difficulty in getting the

situation, as I had few friends of influence, but my uncle, being a friend of Mr. Jackson, succeeded in inducing that gentleman to give me a trial. In consideration of the fact that our family was large and with many mouths to feed, and an invalid father, it was necessary that I, the oldest, should now take some part in supporting the family. My wages at first were small and I worked hard. No closing hardware shops at 8 o'clock those times, or summer vacations either. I worked from 6 in the morning until after 10 at night. I will say "worked," but that hardly expresses the idea, for in the evenings I had little work to do, but then I must stay until my proprietor thought it time to go home, and as he usually chose this time of the 24 hours to write his letters and gossip with his friends, who dropped in after tea to have a friendly smoke, he was in no hurry to lock up.

TRIED HARD TO PLEASE.

I studied hard to please him and do my work well, and I grew up with the business. My pay also increased with my years of service, but with it my expenses. I could not think of seeing my sisters going out into the world to work for a living, so I supported them. I helped school my younger brothers. When they were able to pay their own way and my sisters married, I thought I would now be able to save some money and eventually get a start. But the death of my father and the long illness of my mother and the expense connected therewith greatly reduced my small savings.

Then at 25, having no home of my own, I married. All my money I had accumulated went into my new home. My wife was anything but extravagant, but she did not seem to have any idea of saving money. I used to try and get her to agree with me to lay by a little portion of my wages, but she always claimed there was something needed for the house. All these years my pay was good and we had all of the luxuries of life. When I was 35 my employer died, and as he left no son or heir to carry on the business I was thrown out of employment.

AN OPPORTUNITY LOST.

Had I been possessed of even \$1,000 I might have made arrangements with the executors of his estate for the conduct of the business myself. But I had nothing saved, so the goods were auctioned off and I had to seek another position. I succeeded, but with lower wages I found it hard to economize. I knew the hardware business of the town and was conceited enough to believe I could run a store of my own, but where could I get the money? I might have succeeded in borrowing some by giving security upon my house and lot or mortgaging my life insurance policy. But the courage needed to give up a situation, though of small pay, and embark in business, with a possible chance of failure, knowing I had a family depending upon me, I did not possess. Had I done so at this time I am confident now that I would have been successful. There was a good opening for a hardware store, and about this time a young school teacher who had saved about \$500 started a store, although with little knowledge of business, and now is a prosperous and successful merchant.

REASONS FOR FAILURE SUMMARIZED.

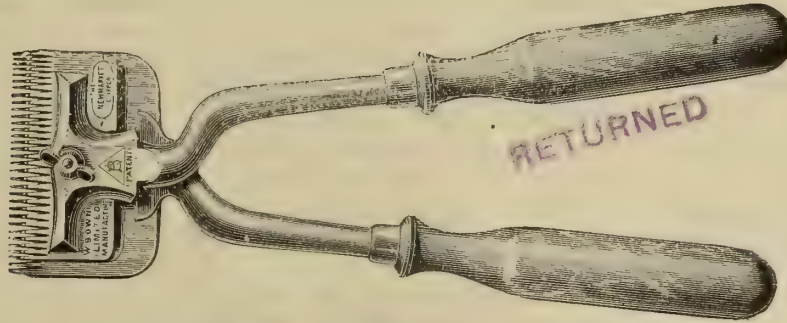
As I look back I can now see the chances that were placed before me and through lack of money or sufficient courage I failed to grasp the golden opportunities as I passed them in my long apprenticeship. I see now the mistakes I have made, but it is too late. I am a back number and must soon be laid upon the shelf. I was never a spendthrift, never smoked or drank, did not dress extravagantly and always practised economy. I place first as a reason of present position my good nature and my inability to refuse, when asked for assistance by my friends. I could not bear to say no when asked by some acquaintance for a loan. The consequence was I lent much money which I never saw again. Then the fear of failure prevented me from striking out on my own behalf as a business man.

The lessons I have learned, though of no avail to me, might be of value to young men. I would urge upon them the necessity of saving a portion of their wages, and to begin at once—not wait until they are earning a large salary, but even when they earn little more than will barely support them.

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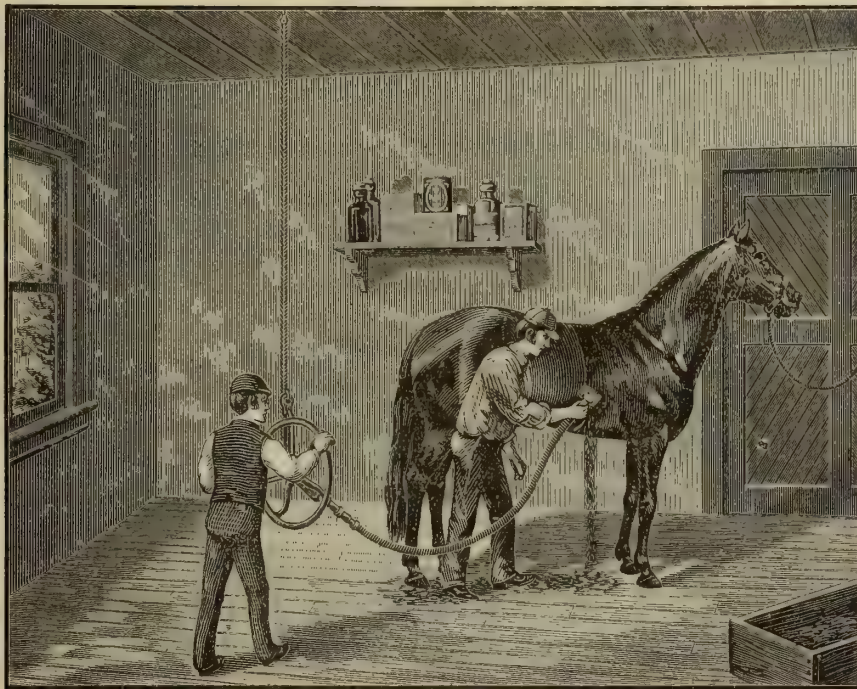
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HARDWARE FABLES.**THE AUGER BIT AND THE CHISEL.**

AN AUGER BIT thus spake to his Companions who belonged to his Set: "We are a most Respectable Aggregation. We not only have a fine polish, but Extension Lips that can talk without limitation." A Chisel which had overheard this remark said: "That is why you are such dreadful Bores. You never know when to let up a Bit."

It is never best to call attention to what you suppose to be your own virtues, for others may consider them only faults.

THE CLOTHES WRINGER AND THE DOOR BELL.

A Clothes Wringer that had been tried and found wanting was returned to a Hardware store and placed in close proximity to a Door Bell. "How did you happen to lose your place?" asked the Door Bell.

"I think it must have been because I could no more ring the clothes dry than you could," said the Clothes Wringer. Whereupon the Door Bell became very angry, held its tongue and refused thenceforth to have any further conversation with the Clothes Wringer.

A joke that is personal will often cause trouble in the family.

THE FISH HOOK AND THE REEL.

A Fish Hook was awakened out of a sound sleep by a Reel, which said: "How will you like it when some small boy sticks a nasty Angle Worm over you?"

"A great deal better than the Worm will," said the Fish Hook.

No matter how unfortunate our surroundings may be, we do not have to look far to find someone who is squirming under greater troubles.

THE EGG BEATER AND THE JEWSHARP.

A cranky Egg Beater that sought to pick a quarrel with a Jewsharp began with this ill-natured remark: "You are the most insignificant of all musical instruments. I don't like music and wish it had never been born."

"Everyone to his taste," said the Jewsharp; "but although you would not be pleased, for example, with 'The Lay of the last Minstrel,' yet were it not for the Lay of the Hen you would never have come into existence."

We sometimes unwittingly abuse our best friends.

BARBED VS. PLAIN WIRE.

A Spool of Barbed Wire became greatly enamored of itself and thus addressed the Plain Wire: "There is as much difference

between you and me as there is between a Cannibal and a Civilized Man."

"True," said the Plain Wire, "but you should reverse your comparison, for you are the one that is barb-arious."

"I call that an awful poor joke," said the Barbed Wire.

"Of course," said the Plain Wire, "because it is one on you."

When there are but two in a party a joke to be satisfactory to both must hit some other fellow.

THE SHOVEL AND THE GRIDIRON.

A Shovel that stood in a rack was discovered by a Gridiron to be in a most despondent and tearful condition. "Wretched being that I am," said the Shovel. "I may some day be sold to a grave digger and be forced to spend my days attending funerals."

"Oh, quit your worrying about what may happen and enjoy yourself now. Any way, it wouldn't be your funeral. Look at my prospects. I shall in course of time be sold to someone who will hold me over a hot fire day after day, but I am not going to let that prospect prevent my enjoying the present."

Much depends upon one's disposition whether he gets much out of life and ceases to worry needlessly about the future.

THE PLANE AND THE SILVER PLATED SPOON.

A Plane which was both patient and good-natured was often forced to listen to considerable abuse from a Silver Plated Spoon that thought itself both very beautiful and a great wit. The spoon always wound up its remarks with: "I am glad I am not as Plane as you are," and then it would giggle as though it supposed it had said something very witty and original. One day the Plane lost control of its temper and said: "Mr. Spoon, would you like to know my opinion of you? I think behind that thin plating of yours there is only base metal, and that long after you have been thrown away I shall be a useful member of society. Your brightness is only skin deep and a few hard rubs will take all this fancied cleverness out of you."

A few hard rubs will knock all fun out of a shallow man.—By G. H. B. in Iron Age.

A CAST STEEL GATLING GUN.

A huge gatling gun is being manufactured in Cleveland, Ohio, under the direction of Dr. Gatling. The Otis Steel Co., of that city, cast in one piece some weeks ago this gun, which weighs 60,000 pounds. It is now being bored by the Cleveland City Forge and Iron Co. The first boring, 6½ inches, has been finished and the gun will now be bored to a diameter of 7¾ inches. Then

special machinery designed by Dr. Gatling will be used for the internal forging by compression; then the gun will be annealed.

PATENTS GRANTED.

Below will be found the complete report of patents granted last week to American inventors by the United States Government, which report is prepared specially for this paper by Marion & Marion, solicitors of patents and experts, head office, Temple Building, Montreal:

- No. 595,166—C. J. Greiner, car coupling.
 594,851—C. E. Brown et al, car fender.
 594,997—J. E. Lemyre, lasting hammer.
 595,015—J. H. Driller, nail or tack holding and setting hammer.
 594,883—C. C. Kesty, wire nail making machine.
 595,069—H. D. Nisbet, needle bath.
 594,854—T. W. Calvert, nut lock.
 594,918—E. J. Sweeny, nut lock.
 594,974—L. Tait, range or stove.
 594,914—W. A. Shorb, pipe reamer.
 594,857—R. G. Chase, steam trap.
 594,885—H. Lucas, steam trap.
 594,867—S. W. Gillin, inlet tongue.
 594,843—J. B. Arntzen, valve.
 595,203—B. L. Peck, motor vehicle.
 595,163—T. Green, wrench.

ACID FOR MARKING SAWS.

If it is desired to mark a small number of saws, says an exchange, it may be done by covering the steel with a wax ground, which is done by warming the steel and spreading over it a thin coating of wax. When this is cold the name or design is scratched in the wax, and when it is cut through to the steel a solution composed of 1 part of nitric acid to from 4 to 6 parts of water is applied and left to act for a few minutes, after which it is washed off. Where it is desired to mark a number of articles with the same design a rubber stamp may be used with the design so made that the letters that are to be etched with the acid shall be depressed in the stamp. Then a plain border is put around the design large enough to allow a little border of common putty to be laid around the edge of the stamped design to receive the acid. For ink use rosin, lard oil, turpentine and lamp-black. To ¼ pound of rosin put 1 teaspoonful of lard oil. Melt and stir in a tablespoonful of lamplack, mix thoroughly and add enough turpentine to make it the consistency of printer's ink when cold. Use this on the stamp in the same manner as when stamping with ink. When the article is stamped place a little border of common putty around and on the edge of the stamped ground. Then pour within the border enough acid mixture to cover the figure, and let it stand a few moments, according to the depth required, before rinsing off. The etching acid to use for this consists of 1 part nitric acid, 1 part of hydrochloric acid and 10 parts of water by measure.

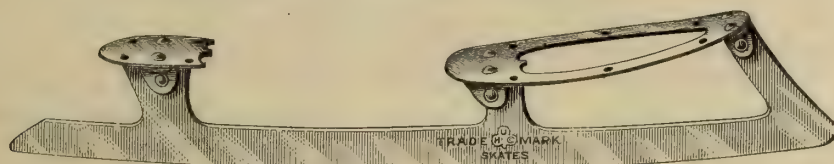
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



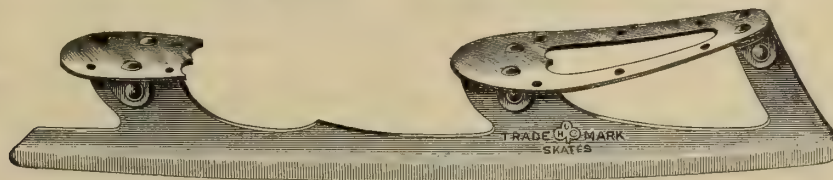
Plain Runner, Straight.



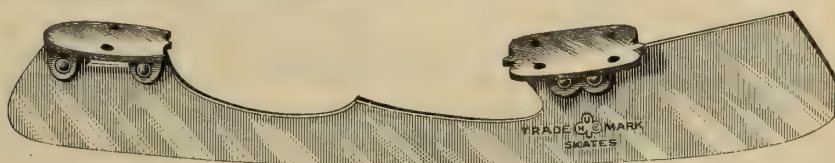
Plain Runner, Curved Blade.



Ribbed Runner.

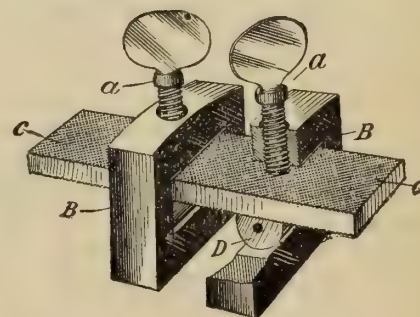


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



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POSITION OF THE MIDDLEMAN.

It is customary with some people to speak of middlemen, which is practically another name for traders, with some contempt, as a class which confers but little benefit on the community. It is pointed out that agriculturists enrich the world because their labors add to its fruitfulness. In the same way manufacturers confer benefits on mankind, for they turn crude materials into finished articles that are eminently calculated to make life more enjoyable. But middlemen, who render no services except that of being a medium of communication between producers and consumers, which part they play solely for their own profit, of what good are they in the world? Why should not producers and consumers be brought together, and thus eliminate the go-between who robs both, the former of some of the gain which should have been the proper reward of his industry, and the latter of some of his earnings by making him pay more for the wares he requires than the producer is willing to take for them? Such is the language occasionally used by theorists who think they are only talking an advanced kind of political economy. In reality they are talking unmitigated rubbish.

A PRODUCT OF CIVILIZATION.

Middlemen are an essential product of civilization, and since its very dawn they have played a useful, indeed an indispensable, part. The moment that individuals ceased to supply themselves directly with the various articles and accommodations they made use of, that moment must a commercial intercourse have begun to grow up among them. For it is only by exchanging that portion of the produce raised by ourselves that exceeds our own consumption, for portions of the surplus produce raised by others, that the division of employments can be introduced, or that different individuals can apply themselves in preference to different pursuits. And not only does commerce enable the inhabitants of the same village or parish to combine their

separate efforts to accomplish some common object, but it also enables those of different provinces and kingdoms to apply themselves in an especial manner to those callings for the successful prosecution of which the district or country which they occupy gives them some peculiar advantage. As M'Culloch has accurately pointed out, this territorial division of labor has contributed more, perhaps, than anything else to increase the wealth and accelerate the civilization of mankind. And such a result would not have been possible but for the middleman.

OFFICE OF THE MIDDLEMAN.

Let us prove this. While the exchange of different products is carried on by the producers themselves, they must unavoidably lose a great deal of time and experience many inconveniences. Were there no merchants, a manufacturer desirous of selling his produce would be obliged, in the first place, to seek for customers and to dispose of his wares as nearly as possible in such quantities as might suit the demands of the various individuals inclined to buy them, and after getting his money he would next be obliged to send to a score or so places for the different commodities he required for his own use, so that, besides being exposed to vast trouble and inconvenience, his attention would be continually diverted from the labors of his manufactory. Under such a state of things the work of production in every different employment would be meeting with perpetual interruptions, and many branches of industry which are successfully carried on in a commercial country would not be undertaken. This provides the opportunity of which the middleman has ever been quick to take advantage. The establishment of a distinct mercantile class effectually obviates the inconveniences outlined above. When a set of dealers erect warehouses and shops for the purchase and sale of all descriptions of commodities, every producer, relieved from the necessity of seeking customers, and knowing beforehand

where he may at all times be supplied with such products as he requires, devotes his whole time and energies to his proper business. The intervention of the merchant gives a continuous and uninterrupted motion to the plough and the loom. A great authority on the subject has declared that "were the class of traders annihilated, all the springs of industry would be paralyzed." The numberless difficulties that would then occur in effecting exchanges would lead each particular family to endeavor to produce all the articles they had occasion for; society would thus be thrown back into primeval barbarism and ignorance, the divisions of labor would be relinquished, and the desire to rise in the world and improve our condition would decline according as it became more difficult to gratify. Obviously this would be a change for the worse, as far as all the best interests of mankind are concerned; and that there is no fear of it taking place is due to the energy and capacity of the misunderstood middleman.

TWO SUBORDINATE CLASSES.

The mercantile class has always been divided into two subordinate classes—the wholesale dealers and the retail dealers. That each is indispensable, and the necessary complement of each other, a little consideration will show. The former purchase the various products of art and industry in the places where they are produced or are least valuable, and carry them to those where they are more valuable or where they are more in demand; and the latter, having purchased the commodities of the wholesale dealers under conditions more favorable than those of buying direct from the producers, even allowing for an increase of price, collect them in shops and sell them in such quantities and at such times as may best suit the public demand. Obviously the two classes of dealers are alike useful; and the separation that has been effected between their employments is one of the most advantageous divisions of labor. The operations of the wholesale dealers are analogous to those of the miner. Neither the one nor the other makes any change on the bodies which he carries from place to place. —Exchange.

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and
Canadian
Acme



German
and
Canadian
Hockey

Skate Fixtures

LARGE STOCK



PRICES LOW

M. & L. Samuel, Benjamin & Co.

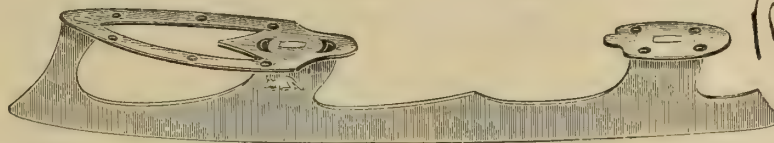
ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West **TORONTO.**

The Skate for the Ladies....



THE LADIES' BEAVER.

Unapproached in beauty of design and symmetrical appearance.
MADE VERY LIGHT and full nickel plated on copper to prevent rust.

A most suitable Christmas present.

The STARR MANUFACTURING CO., Limited

T. L. PATON, Resident Agent
MONTREAL.



Dartmouth, Nova Scotia

*Returned
Feb. 9/97
To Montreal office
A.S.*

BUSINESS CHANGES.

DIFFICULTIES, ASSIGNMENTS, COMPROMISES.

Pierre Dansereau, plasterer, Montreal, has assigned.

Horace Hines, general merchant, Lower Argyle, N.S., has assigned.

Premont & Co., general merchants, St. Felicite, Que., have assigned.

Joseph Godbout, general merchant, St. Raphael, Que., has assigned.

H. B. Lafleur & Co., general merchants, St. Adele, Que., have assigned.

The bailiff is in possession of the general store of R. E. Porritt, Milton, Ont.

P. D. Proulx, general merchant, Asbestos, Que., has assigned to Lamarche & Benoit.

E. Gingras, general merchant, West Broughton, is seeking an extension of time.

Hercule Chene, general merchant, Cheneville, Que., has compromised at 50c. on the dollar.

J. and S. Jones, hardware merchants, Pembroke, Ont., have assigned to Gideon Delahaye.

Cardinal & Co., general merchants, St. Stanislas de Kosta, Que., are offering 20c. on the dollar.

E. A. Gauthier & Co., general merchants, Papineauville, Que., have assigned to Lamarche & Benoit.

George B. Armstrong, general merchant, Lower Nicola, B.C., has satisfied a chattel mortgage of \$1,120.

A. A. Laferriere & Co., general merchants, Berthier, Que., have compromised at 50c. on the dollar.

H. C. Pickles, general merchant, New Germany, N.S., is offering 40c. on the dollar. His stock is advertised for sale by tender.

Alexander M. Cook, general merchant, etc., Dundela, Ont., has assigned to Archibald McNab, sheriff, Cornwall, Ont., and a meeting of his creditors will be held on the 22nd inst.

McKenzie & Campbell, general merchants, Kirkfield, Ont., have assigned to E. J. Henderson, Toronto.

PARTNERSHIPS FORMED AND DISSOLVED.

Delorme & Frere have started business as hardware merchants in Montreal.

Osborne & Huffman, general merchants, Kinburn, Ont., are about dissolving.

Heath & Heath are commencing business as general merchants in Georgeville, Que.

Pierre Ostigny and Phileas Cardin have registered as proprietors of the firm, Ostigny & Cardin, contractors, Boucherville, Que.

SALES MADE AND PENDING.

P. A. Somerville, general merchant, Georgeville, Que., has sold out.

R. Buzzell, general merchant, Cherry River, Que., has sold out.

The stock, etc., of the estate of John E.

Black, general merchant, Springfield, Ont., is advertised to be sold on the 17th inst.

G. W. Brock, general merchant, Glen Sutton, Que., has sold out.

Samuel McLeod, lumber miller, Prince Albert, N.W.T., has sold out to Keith & Co.

The stock of James Powell, general merchant, has been sold at 55¼c. on the dollar.

CHANGES.

Robert F. Taylor is opening out as general merchant in Port Latour, N.S.

Jules Regnier is commencing business as general merchant in Cherry River, Que.

The Massey Station Telephone Co., Limited, has obtained a charter of incorporation.

The Dewitt Langlois Drilling Co., of Montreal, Limited, has made application for incorporation.

Beatrice Etta Burke, wife of John Walter Quipp, has registered as proprietress of the firm J. W. Quipp & Co., hardware merchants and plumbers, Montreal.

DEATHS.

James McQueen, coal and wood dealer, Galt, Ont., is dead.

James Mason, of Marshall & Mason, hardware merchants, Strathroy, Ont., is dead.

Robert Simpson, of the Robert Simpson Co., Limited, departmental store, Toronto, is dead.

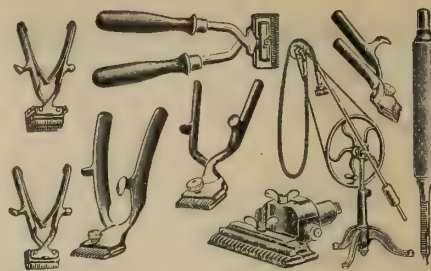
WAS CORDIALLY RECEIVED.

Mr. Maurice Ward, representing a leading hardware firm in Sheffield, Eng., arrived at the Manitoba yesterday, returning from the Coast. Mr. Ward is greatly surprised at the cordial reception he met with from merchants everywhere in Canada, and considered that the feeling towards British jobbers is such as to greatly encourage and strengthen the feeling of reciprocity between Canada and the Motherland. —Winnipeg Free Press, Dec. 14.

HEADING FOR GREAT BRITAIN.

Mr. J. S. Bennett, of Robt. Wyatt & Son, hardware merchants, Winnipeg, was in Toronto this week on his way to Great Britain, and called on **HARDWARE AND METAL**. Mr. Bennett is the inventor of Bennett's shelf-hardware boxes, which, on account of their neatness and uniformity of appearance, their convenience, lightness and durability, at a small cost, are winning much favor from the trade.

The foundry has been lighted by electricity. The entire town will be a blaze of incandescence before long, so rapidly are the people adopting it into their homes and places of business. —Clarksburg Reflector.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.

PERSONS addressing advertisers will kindly mention having seen their advertisement in **Canadian Hardware and Metal Merchant.**

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

Manufacturer's Agents Wanted.

In view of the constant inquiries from manufacturers and merchants for names of good representatives in leading centres in Canada we are preparing a typewritten list of all the firms open for agencies.

This will be held at our offices for use of such inquirers.

It is important that the list be as complete as possible, and we will be glad to include everyone interested.

There will of course be no charge.

The following information is necessary

Name.

Address.

List of agencies now held.

References.

Address replies to _____

HARDWARE AND METAL
Montreal or Toronto

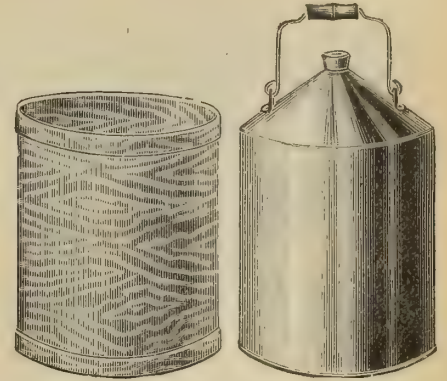
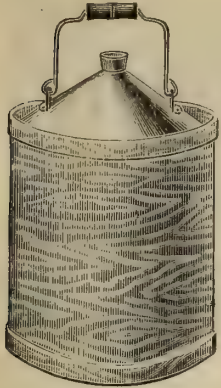
ESTABLISHED 1860 ♦ INCORPORATED 1895

Jacketed Cans

FOR SHIPPING OIL, VARNISH, ETC.

Tin Cans, with Bail Handles, Bung Holes
for Cork or Screw Caps; Wood Jacket.

MADE IN ALL SIZES


THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal
BERTRAM, WILSON & CO.

SPECIAL PRICES ON

TOOL STEEL

DRILL STEEL

PICKS

MATTOCKS

CROW BARS

AXES

FILES and SAWS

IRON, STEEL
HARDWARE and BICYCLE
MERCHANTS53 Yonge St.
TORONTO
**Acme
Genuine
Halifax**

Skates just received. Large assortment.
Full line, including Hockeys. The
Genuine Halifax as cheap as the imita-
tion German line. Prompt shipment
guaranteed.

**The John Bowman
Hardware and Coal Co.**

LONDON, ONT.

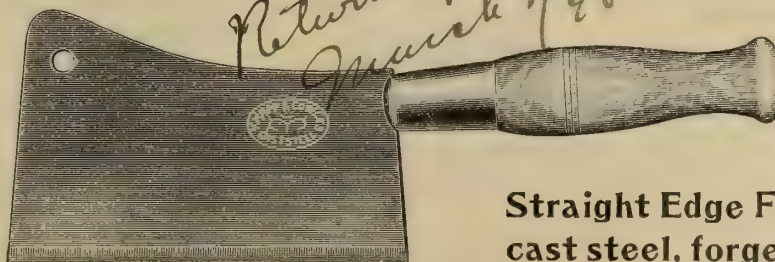
NOW READY FOR BUSINESS

Four hundred and fifty-six cases of
New Goods opened.

The Knapp & Cowles Mfg. Co., Bridgeport, Conn.

U. S. A.

SEND FOR

Catalogue..
of our Fall
line of
**HARDWARE
SPECIALTIES**


NO. 2 CLEAVER.

**Straight Edge Family Cleaver. Best
cast steel, forged; with heavy steel
ferrules. Perfectly balanced.**

MARKETS AND MARKET NOTES

QUEBEC MARKETS.

MONTREAL, Dec. 17, 1897.

HARDWARE.

BUSINESS in general hardware has gradually diminished to very small proportions, and aside from a small enquiry for certain lines of cutlery, a few bolts, cordage, skates and sleigh bells, there is very little movement noted. Values generally are steady and no further changes in this respect are noted this week. In fact, quietness will now be the general rule until after the New Year.

BARB WIRE—There is nothing doing in barbed wire.

PLAIN WIRE—Quiet and unchanged with discounts 30 and 10 and delivery conditions as before.

WIRE NAILS — There is little change to report in wire nails, business continuing quiet. Base price is unchanged at \$1.90 f.o.b. Montreal.

CUT NAILS — Business quiet, only a few hand-to-mouth orders being noted. Prices remain the same on the basis of \$1.85 f.o.b. Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is only a quiet trade doing; with discounts 50 per cent.

HORSESHOES—Remain the same as last reported. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS — As last noted. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE — Quiet; discounts, 12½ per cent.

BOLTS—A few small orders are reported. Discounts are: Carriage bolts, ¼ to 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS, ETC. — Trade continues quiet. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10 and 5, and washers, 50 to 50 and 10 per cent.

FILES—Remain the same. We quote as follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best

United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—Unchanged since the advance in manilla last week, while trade is quiet. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16, 7¼c.; ¾, 7¾c.; 5-16 and ¼, 8¼c., and 3-16, 8¾c.; lath yarn, 6c.

CHURNS—Quiet and unchanged.

CLOTHES WRINGERS—Prices as before: Royal Canadian, \$29.

SPADES AND SHOVELS — There is a moderate enquiry for the cheaper sorts.

SKATES—Jobbers are busy with delayed orders, but new business is not particularly brisk.

SLEIGH BELLS— There is nothing specially new to report in connection with this line.

WARE—Remains quiet.

SPORTING GOODS—There are few new orders coming in for these.

CUTLERY—Sorting orders of fair dimensions continue a feature in cutlery.

BUILDING PAPER—There is a fair demand and prices are steady. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.45.

HINGES—Quiet and steady. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

SHOT — Steady. Dropped shot, 6c.;

chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Trade is dull and prices unchanged at \$2.15 to \$2.25 for English, and \$1.95 to \$2.10 for Belgian.

FIREBRICKS — Dull at \$17 to \$21 per 1,000 as to brand.

METALS.

Trade in heavy iron and metals is extremely quiet, and no change is looked for now until the turn of the year. This applies to every line on the list.

PIG IRON—Quiet and steady. No. 1 Hamilton, \$16.50; No. 2, \$15.50; Ferona, \$16; Siemens, \$16; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—Some round lots have changed hands at \$1.35, but we quote \$1.45 to \$1.50.

BAND IRON—Very little movement, with prices based on 35c. advance on bar iron.

HOOP IRON—Values on this have been shaded in some cases, but we still quote \$2.

SHEET IRON—A quiet trade is noted on the basis of \$2.25.

SHEET STEEL—Quiet and steady on the basis of \$2.35.

GALVANIZED IRON—There is little new business to report, and the books have almost been cleared of old orders. We quote: Queen's Head No. 28, \$4 to \$4.15.

TINNED IRON—A few small lots are asked for, the base price being 5½c. for 6 x 30 No. 24; other sizes the usual extras.

LEAD PIPE—Very little doing, and prices

Christmas Goods.

Decorated Enamelled Wares

(Our own make.)



Tea Pots, Coffee Pots
Cups and Saucers
Mugs, Cuspadores
Wash Bowls and Pitchers
Toilet Sets, etc.,

with assorted decorations on white enamel and with extra decorations on fancy color enamels.

Order Early.

The McClary Mfg. Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER
FOR PROMPT SHIPMENT order from McClary's.

When Booking your Order for

BARB
TWIST
or
PLAIN

WIRE

insist on getting

"OLIVER"

BRAND

It's uniform in quality and finish, and price no higher than inferior brands.

A. C. LESLIE & CO.

Agents

... Montreal

Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONT.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON

MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT

Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,

Managing Director and Treasurer

steady at 7c. for lead pipe, 7½c. for composition waste, with a discount of 27½ per cent.

PIG LEAD—Demand is quiet at \$3.85 to \$4.

INGOT TIN—As last quoted under a small trade at 16c.

INGOT COPPER—Trade dull and prices unchanged at 12c.

SHEET COPPER—Quiet, but steady. We quote: Sheathing copper, 14½ to 16c., according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There is no activity to report, and prices are unchanged on the basis of \$2.10 to \$2.25.

TIN PLATE—There are only a few small lots moving this week. We quote: Coke I. C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I.X., \$3.90 to \$4; P. D. Crown, I.C., 3.80; do. I. X., \$4.80.

TERNE PLATES—Quiet and unchanged on the basis of \$6.

COIL CHAIN—There are a few small lots moving, and we quote \$2.85 for ⅝ up.

SHEET ZINC—Steady and unchanged at 5 to 5¼c.

SOLDER—Quiet at 11 to 11½c.

SPELTER—As before, \$4.50 to \$4.70, as to grade.

ANTIMONY—A few small lots have been asked for at 9½c.

IRON PIPE—There has been no further change in iron pipe and orders are not large. We quote as follows: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.40; ¾-inch, \$2.85; 1-inch, \$4; 1¼-inch, \$5.15; 1½-inch, \$6.65; 2-inch, \$9; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

GLASS.

The glass market has not exhibited any special activity since the rise. We quote: First break, \$1.40; second do, \$1.50 per 50 feet; third break, 41 by 50, \$3.10, and 51 by 60, \$3.30 per 100 feet.

PAINTS AND OILS.

There has been little change in this department during the week, business being confined to a few small lots of a hand-to-mouth order. Linseed oil and turpentine continue firm abroad, but there has been no change here.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¼c.; kegs, 4½c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

Cow Ties

Prompt shipment. Full line. 4 kinds. 6 sizes.

The B. Greening Wire Co., Limited
HAMILTON AND MONTREAL

Abbott & Co.

FACTORIES

...MONTREAL

CUT NAILS

Clinch and Pressed Nails, Horse Shoes (Steel and Iron), Railway and Pressed Spikes, Mine and Wharf Spikes, Drift Bolts, Washers (Steel and Iron).

Nova Scotia Steel Co.

Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS MARTIN

Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of . .

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

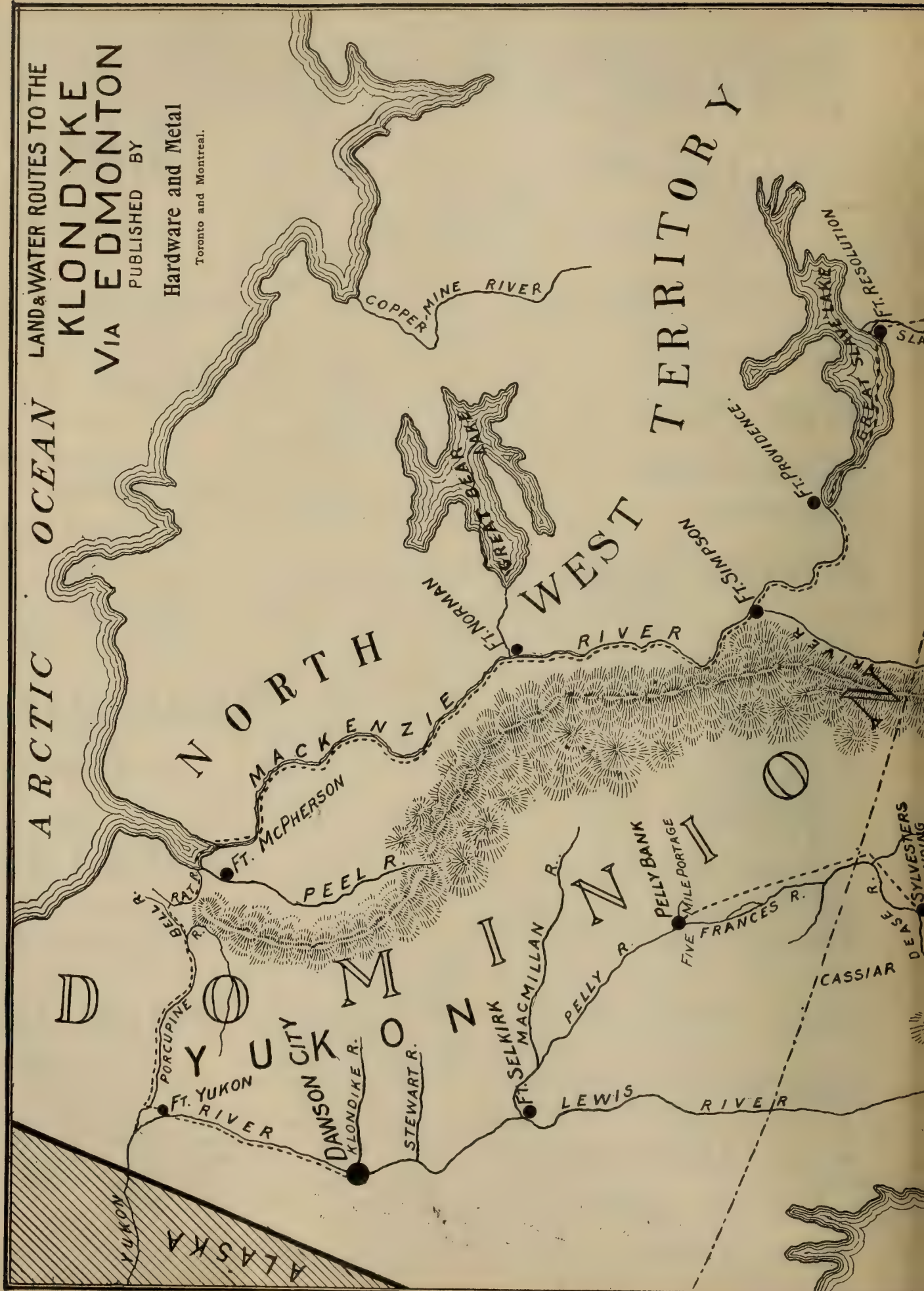
Send for Catalogue C.

The Wightman Sporting Goods Co. 403 St. Paul St.
MONTREAL

ARCTIC

Hardware and Metal

Toronto and Montreal.



LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less. Delivered anywhere in Ontario between Montreal and Oshawa at 1c. per gallon advance and freight allowed.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

There is a fair trade in petroleum and prices are unchanged. We quote: Canadian, 14c. in car lots and 15c. in small quantities, and American 16½c. in car lots and 17½c. in small lots.

COAL.

A moderate demand is experienced for coal at the following: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

The hide market continues steady. We quote: Beef hides, 6½ to 8½c., as to grade, and lambskins 75 to 80c. each.

ONTARIO MARKETS.

TORONTO, Dec. 17, 1897.

HARDWARE.

BUSINESS, which has been keeping remarkably good for this time of the year, has shown a disposition during the past week to ease off. Trade is, however, by no means what can be termed quiet. Orders are still coming in nicely, but they are, on the whole, small. A few orders for United States barb wire are being booked for spring delivery. Business is still comparatively good in wire nails, and a rather better feeling is noticeable in cut nails. Horse nails are moving freely, and a brisk demand is being experienced for horseshoes. A slight improvement has taken place in the demand for churns. Shipments of skates having arrived, jobbers are now in a better position to fill orders for the cheaper descriptions of hockey skates. In building paper business is not so good as it was. Prices are much about the same as a week ago.

BARB WIRE—A few orders have been booked by jobbers for barb wire of United States manufacture at \$1.82 f.o.b. point of shipment, delivery in the spring. Terms are 30 days or 2 per cent. 10 days. Barb wire for immediate delivery is nominally \$2.30.

ORDINARY FENCE WIRE—United States quotations having been withdrawn, no orders of any consequence have been booked lately.

PLAIN WIRE, ETC.—Trade continues quiet. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—A number of orders, somewhat larger than usual, have been received during the past week. Base price is \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points the price is \$1.90, freight equalized in Montreal. Carload lots 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—A little better feeling prevails, but no large quantities are moving. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight will be equalized from these points.

HORSE NAILS—Are moving freely. The makers of "C" brand are now in a position to fill orders more promptly. Discount, 50 per cent.

HORSESHOES—Trade is exceptionally brisk, and orders for the steel kind are coming in more freely. We quote \$3.25 f.o.b. Montreal or \$3.40 Toronto.

SCREWS—A good trade is being done. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, 87½ and 10 per cent.

BRASS AND COPPER WIRE—Quiet. Discount, 12½ per cent.

BOLTS—The demand is fair. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—Business continues fair. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—There is very little doing. We quote as follows: Sisal, 7-16 in. and

larger, 6¼c.; ¾ in., 6¼c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¼c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16 in., 8¾c.; 3-16 in., 8¾c.; deep sea line, 13½c. for water laid, and 14½c. for machine-made; hemp, 7 to 9c.

CHURNS—Very little improvement can be noted. Discount, 60, 10 and 5 per cent. Delivery points are Toronto, Hamilton, London and St. Mary's. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—The movement is slow. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Trade has fallen off somewhat. Discount, 45 and 2½ per cent.

FALL SPECIALTIES—The jobbers are now in a position to supply most of the sizes in the cheaper kinds of hockey skates, the long-looked-for shipment having arrived. The demand for fall specialties generally continues good.

CUTLERY—A good brisk sorting-up trade is being done.

SNOW SHOVELS—Trade has not been so good. We quote \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—The quality moving has fallen off somewhat, but a fair trade is still being done. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Belting has recently advanced about 25 per cent. in price in the United States, and the discounts here are somewhat lower. We quote: Standard, 45, 10, and 10 per cent.; extra, 40, 10, and 10 per cent.; agricultural, 70 per cent.

HINGES—Business is moderate. We quote 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—The market continues brisk, with prices unchanged. We quote: in barrel lots: Canadian Portland, \$2.50; English do., \$2.85; Belgian do., \$2.75; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

The metal trade continues fairly active. About the only change worthy of note is a decline of ¼c. per lb. in the price of tinned iron.

PIG IRON—Steady. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Trade is slow. We quote base price at \$1.40 to \$1.45 in carload lots

TO THE TRADE

The Chicago Post Office

The Chicago Post Office Building has for the past few months been in process of demolition, to be succeeded by a larger and finer structure on the same site. It was erected in the years 1872 to 1876, and was thoroughly fire-proof, having granite walls, cast iron columns, iron beams, corrugated sheet iron floor arches with concrete top covered with tiles, metal lath and iron roof frame-work covered with slate. From the beginning of the work of demolition, frequent inspections of the metal parts have been made by engineers interested in noting what ravages had been made by rust. A committee was appointed by the Western Society of Engineers to report upon the condition in which the iron was found. This report has not yet been made, but much information has doubtless been secured which will be of great value. Other engineers have pursued independent investigations with results highly reassuring to those having faith in the permanence of iron and steel structures. The metal lath taken from the partitions was found only slightly rusted from actual contact with the moisture of the mortar. It presented no evidence of progressive and continuing rust. The side toward the partition was almost without deterioration. The corrugated sheets taken from the floors were of poor quality and exhibited numerous defects, clearly of mechanical origin, but showed no damage from rust. The upper side, on which concrete had been laid, showed bright metal when the adhering cement was scraped off. The under side, which had been painted, was well preserved. Pieces of the corrugated sheets taken from positions in which concrete had not been filled, leaving hollow spaces, had not sensibly rusted when exposed to such cavities. The beams and columns were all found in excellent condition, with even less indication of rust than would be shown if they had been lying for a short time in a builder's yard.

A notable feature demonstrated was the fact that all iron work exposed to cement had been well preserved, indicating the indestructibility of metal foundations imbedded in cement. The metal lath on partitions covered with lime mortar had been slightly attacked by rust, as above mentioned, but the process of oxidation had only been temporary and not indefinitely continued as might have been presumed. The only places showing deep-seated rust were a few locations in the roof, at which points there had evidently been leakages of long standing, but even in these instances the strength of the metal parts had not been materially affected. The result of the inspection of the iron salvage from this building was particularly gratifying to those who use sheets in interior construction, against which a prejudice has existed because of their presumed liability to rapid destruction by rust owing to their thin body. The makers of metal lath have also been benefited by the demonstration of the very slight ravages of rust. It seems reasonable to presume that, if practically no damage was found after twenty years, the life of the metal parts of a building could be considered practically unlimited. Importance is attached by the engineers from whom this information has been obtained to the fact that the iron used in this building had been well painted before it was covered.

METALLIC ROOFING CO. Limited - TORONTO

Manufacturers of Reliable Sheet Metal Building Materials

Toronto and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—The improvement noted last week continues, and a nice business is now being done. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—Some large orders have been received for No. 1 quality, and in No. 2 a good business has been done. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—Business is not as good as it was a week ago. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—Business continues good, case lots being called for frequently, while quite a number of orders are being booked for import early next spring. We quote: Queen's Head (case lots), 16 gauge, 3½c.; 18 to 24, \$3.87½c.; 26, 4½c.; W. G. 28 gauge, \$4.37½c.; Gordon Crown (case lots), 28 gauge, 4¼c.; 26

gauge, 4c.; 22 to 24 gauge, 3¾c. per lb. American (case lots), 28 gauge, \$3.80; 26 gauge, \$3.55; 22-24 gauge, \$3.30; 18 to 20 gauge, \$3.05. Small lots in all the above are ¼c. per lb. higher than figures named.

STEEL BOILER PLATES—Quiet. We quote: 3¾ and larger, \$1.75 per 100 lbs.

TINNED IRON—Outside of orders being booked for import business is only small, while prices have been reduced 25c. per 100 lbs. We quote: Up to 20 gauge, \$5.25 per 100 lbs.; 22 to 24 gauge, \$5.75; 26 gauge, \$6.25; 28 gauge, \$6.75; special cut sizes, \$4.50; extra large sizes, 6½ to 7½c. per lb.

LEAD PIPE AND TRAPS—Business is only moderate. We quote: Lead pipe, 7c.; lead waste, 7½c., discount, 27½ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on \$10 lots, and 25, 10 and 5 per cent. on \$25 lots and over.

PIG LEAD, ETC.—Orders are coming in freely for small lots of pig lead, but no round lots are moving. We quote pig lead at 4 to 4½c., and bar at 4½c.

SHOT—Quiet. We quote: Dropped shot, 6c.; chilled do., 6½c.; buckshot, 7c. Discount, 12½ per cent.

INGOT TIN—Business continues fair, both for Straits and Lamb and Flag. We quote 16 to 16½c. for Lamb and Flag and Straits.

INGOT COPPER—Trade has been rather quiet this week. We quote 12 to 12¼c.

SHEATHING COPPER, ETC.—Braziers' and roofers' copper are about the only kinds for which there is any call. We quote: Sheathing copper, 14½ to 16c., according to weight and quantity; braziers', 15½ to 17½c. per lb. according to gauge.

IRON PIPE—Orders are smaller than they were, but there is still a brisk trade doing. We quote: Wrought, ¼ to ¾ inch, \$2; ½ inch, \$2.35; ¾ inch, \$2.87; 1 inch, \$3.87; 1¼ inch, \$5.10; 1½ inch, \$6.38; 2 inch, \$9.25 per 100 feet; galvanized, ½ inch, \$4 to \$4.25; ¾ inch, \$4.80 to \$5; 1 inch, \$6.75 to \$7; 1¼ inch, \$9.25 to \$9.62½; 1½ inch, \$11.75 to \$12.25 per 100 feet.

SOIL PIPE—The improvement noted last week appears to have been maintained. Discount, 60 and 10 per cent.

RANGE BOILERS—Not much doing. We quote: Galvanized, 30 gals., \$5.25 to \$5.50; 35 gal., \$6.25; 40 gal., \$7.50; copper, 30 gal., \$22; 35 gal., \$26; 40 gal., \$30; discount off copper boilers, 25 per cent.

CANADA PLATES—Orders still keep coming for small lots. Only one or two large sales are reported. We quote: Half-polished, 52-sheet boxes, \$2.35; ditto, 60-sheet boxes, \$2.40; dull, 75-sheet boxes,

\$2.50; all-bright, "Garth," \$2.60 per box; ditto, "Alaska," \$3.

TIN PLATES—Trade continues steady. We quote: Cokes, \$3 to \$3.10 for 14 x 20; do. squares, \$3.15 to \$3.25; \$6.25 for 20 x 28; charcoal plates, \$3.50 to \$3.60 basis for good brands.

TERNE PLATES—Trade is quiet. We quote: I C, \$6 to \$6.25; I X, \$7.50.

SHEET LEAD—Trade is fair. We quote: 5½c. per lb.

COIL CHAIN—Quite a few orders are being received, but the quantities are not large. We quote: ¼ in., 4½c.; ⅜ in., \$3.70; ½ in., \$3.25. Large quantities can be shaded.

SHEET ZINC—Trade is fair. We quote: Imported, 5¼c. in ton lots, and 5½c. in smaller quantities.

SOLDER—Is moving freely, and quite a number of enquiries for round lots have been received. We quote: Standard, 11c.; strictly half and half, 11½ to 12c.

ANTIMONY—Trade is fair. We quote: Cookson's, 8¾ to 9c.; other makes, 8¼ to 8½c.

GLASS.

Window glass continues in good demand. There is also a free movement of plate and ornamental glass. No further changes are to be noted, although prices are firm, and may be higher yet. We quote: First break in 50-foot boxes, \$1.45, and in 100-foot boxes, \$2.75; double diamond, under 25 united inches, \$4, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

Though the quietness usual to this season of the year generally prevails, there has been an improvement in trade this week. Turpentine is moving nicely. Factory supplies, such as pumice stone, etc., are in good demand. Other goods, except putty, are quiet. Prices are unchanged. We quote as follows:

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50; No. 1, \$5.12½; No. 2, \$4.75; No. 3, \$4.37½; No. 4, \$4; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75; ditto, No. 1, in casks of 560 lbs., \$4.50; genuine, in kegs of 100 lbs., \$5; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs.; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

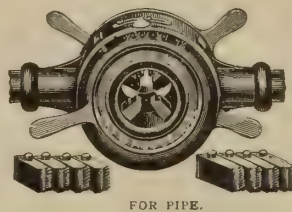
GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

STANDARD of
for
30 Years

NICHOLSON
FILES



FOR PIPE.

In Stocks and Dies
there is no better than

**HART'S DUPLEX
ADJUSTABLE.**

Write for Lists and Discounts
The Hart Mfg. Co.

20 Wood St., Cleveland, O., U. S. A.

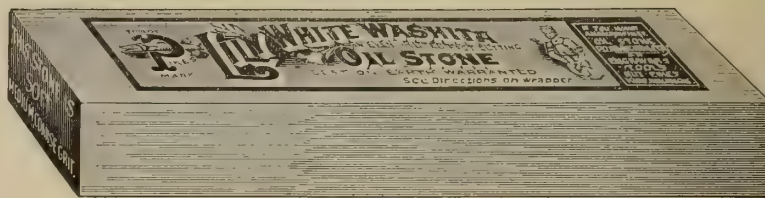
**NICHOLSON
FILE CO.**
Providence, R.I., U.S.A.
Largest Producers in the World



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guaranteed
to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.



IT'S A SURE THING! HE HAS A

Marlin ³⁰/₃₀ Smokeless

HIS BARREL, made of "SPECIAL SMOKELESS STEEL," well rifled, the old BALLARD system, shoots true and hits hard. His CARTRIDGES, loaded with 33 grains of smokeless powder, give 2,500 feet per second velocity. His BULLETS, soft-nosed and flat-pointed, make a wicked wound. His SIDE EJECTING ACTION won't hit him in the face when he pumps in the second shot, and no smoke will obstruct his vision across the SOLID TOP.

Why don't you write for the 196-page Sportsman's Guide (just out)? Tells about powders, black and smokeless; the right sizes, quantities, how to load; hundreds of styles of bullets, lead, alloyed, jacketed, soft-nosed, mushroom, etc.; trajectories, velocities, penetrations of all calibres from 22 to 45; how to care for arms, and 1,000 other things. FREE if you will send stamps for postage to

THE MARLIN FIRE ARMS CO.

New Haven, Conn.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c.; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75; bladders in 100-lb. cases, \$2; 25-lb. tins, 4 in case, \$2.20; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed): Raw, 1 to 4 barrels, 45c.; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c.; in less quantities than barrels, 5c. per gallon extra will be added and packages

charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

A small demand keeps business quiet in all lines. We quote as follows: Agricultural scrap, 40c. per cwt.; machinery cast, 42½c. per cwt.; stove cast scrap, 25 to 30c.; No 1 wrought scrap, 40 to 45c. per 100 lbs.; No. 2, including sheet iron and hoop iron, 10c.; new light scrap copper, 7¾c. per lb.; bottoms, 7½c.; heavy copper, 8 to 8½c.; light scrap brass, 4 to 4½c.; heavy yellow scrap brass, 6c.; heavy red scrap brass, 6¾c.; scrap lead, 2½ to 2¾c.; zinc, 2c.; scrap rubber, 3½ to 3¾c.; good country mixed rags, 75 to 85c.; clean dry bones, 30 to 35c. per 100 lbs.

SEEDS.

There is a brisk demand for alsike and clover in fancy to choice grades for export. Foreign purchasers seem to be willing to

**Going to Retire?
Want to Sell Out?**

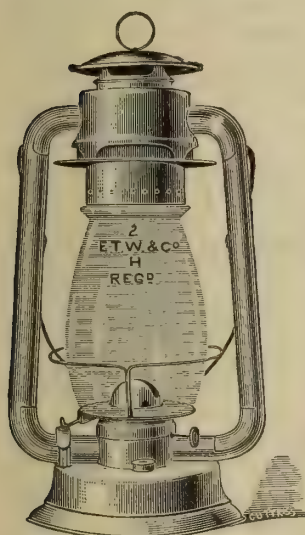
If so, say so in **HARDWARE AND METAL**.
It reaches the most likely buyers. Two
cents a word each insertion.

**WANT
ADVERTISEMENTS**

Are inserted in this paper at the rate of
two cents per word each insertion, **pay-
able strictly in advance**. Ad-
vertisers may have their replies address-
ed in our care free of charge, but must
send stamps for re-addressed letters.

Hardware and Metal, Toronto

E. T. WRIGHT & CO.



Manufacturers
of

**Tubular and
Cold Blast
Lanterns**

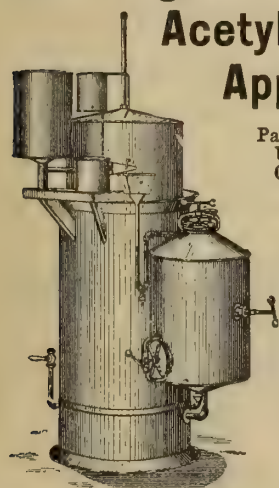
**Bird Cages
Mouse Traps
Flour Sifters**

Stamped
Re-tinned
and Japanned

..TINWARE

HAMILTON - CANADA.

**The Niagara Falls
Acetylene Gas
Apparatus**



Patented in Canada,
United States and
Great Britain.

This is the only
machine perfectly
automatic in
its action, requir-
ing little or no
attention. Mach-
ines always in
stock from 5 to
100 light. Larg-
er sizes on short
notice.

Acetylene Gas the
Coming Light.

Cheaper than Elec-
tric Light, Coal Gas
or Coal Oil.

For Private Dwellings, Business Houses, Churches
Public Halls and Offices.

For particulars write to the

NIAGARA FALLS ACETYLENE GAS MACHINE CO.
Niagara Falls, Ont. Limited

take none but the higher grades, and, as
there is no local demand there is a large
range in price, with dealers not anxious to
buy the poor grades at the lowest rates. Al-
sike is quoted at \$2 to \$5; red clover at \$2.75
to \$3.75. There is very little timothy
offered. What comes in brings from \$1 to
\$1.25 per bushel.

HIDES, SKINS AND WOOL.

HIDES—Market remains firm. We quote
for both cowhides and steerhides: No.
1, 9c.; No. 2, 8c.; No. 3, 7c.

CALFSKINS—We quote as follows: No.
1 veal, 8 lbs. and up, 12c. per lb.; No. 2,
10c.; Dekins, from 30 to 35c.; culls, 15 to
20c.

SHEEPSKINS—Another rise of 5c. has
taken place. They are now selling at \$1
to \$1.05.

WOOL—Pulled wools remain inactive.

PETROLEUM, ETC.

Business is good in all lines, with prices
unchanged. We quote as follows in 1 to
10 bbl. lots, imperial gallon, Toronto:
Canadian, 14c.; carbon safety, 16½c.;
American water white, 17½c.; Pratt's astral,
17c. in bulk.

COAL.

The warm weather keeps business quiet.
Anthracite is quoted at Buffalo and bridges:
Grate, \$4.24; egg, \$4.46; stove, \$4.46;
chestnut \$4.46, net tons.

MARKET NOTES.

Leather belting is firmer.

"Enameline," it satisfies customers.

Tinned iron is quoted 25c. per 100 lbs.
lower.

H. S. Howland, Sons & Co. are in
receipt of a shipment of hockey skates.

UNITED STATES MARKETS.

NEW YORK, Dec. 15, 1897.

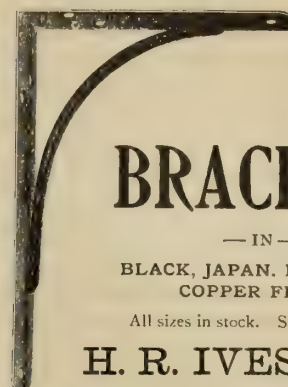
FIG TIN—There was no change in any
particular. London sent a repetition of
yesterday's cable, and no enlivening news
came from there or any other quarter.
Here there was nothing more than ordi-
nary run of orders from consumers or job-
bers and speculation remained inanimate.
Prices were quite steady on the basis of
13.72½ to 13.75 f.o.b. for lots of five tons
or more.

COPPER—The market remains unchanged,
with comparatively little information given
regarding business, but unmistakable firm-
ness on prices displayed by holders gener-
ally. In short, this firmness, along with
the export movement, is quite suggestive of
strong position. Sellers are generally quot-
ing 11c. for Lake Superior, 10¾ to 10⅞c.
for electrolytic and 10½ to 10¾c. for cast-
ing stock.

FIG LEAD—Dealings were unimportant,
and buying interest was very tame, with

WE MANUFACTURE

**Wrought
Steel
Shelf**



BRACKETS

— IN —

**BLACK, JAPAN, NICKEL and
COPPER FINISH.**

All sizes in stock. Send for prices.

H. R. IVES & CO.
MONTREAL

-- 50th --

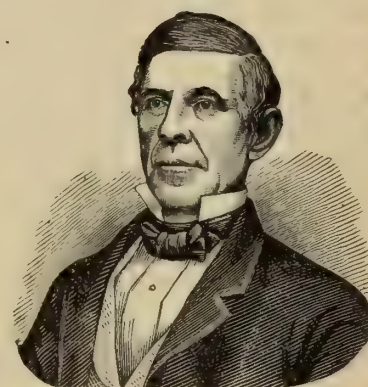
ANNIVERSARY!

ONEIDA COMMUNITY

1848!

Limited

1898!



S. Newhouse

50 YEARS ago Sewall Newhouse, the cele-
brated hunter and trapper, was making traps for
himself and for sale to the Indians, in his little
blacksmith shop near Oneida Creek. He made
each part by hand, forging the springs from old
axe-blades.

50 YEARS ago the Oneida Community bought
some Indian lands from the Government, and
started their enterprises on the Oneida Reservation.
Mr. Newhouse joined the Community, and the
Community began to make traps. To-day the
NEWHOUSE TRAP is the main reliance of
trappers, not only in America, but in every country
of the world.

Newhouse Traps

are sure to go and sure to hold.

bids considerably below sellers' prices where good-sized lots were involved. Carload lots were offered at 3.72½c., and might have been secured at a shade less. London cable quoted £12 11s. 3d. for soft Spanish.

SPELTER—The dullness that has prevailed here for some time past remains unbroken and the market is still in a weakish condition, with 3.90 to 4c. quoted for ordinary Western. London cable was £18 2s. 6d. for good merchant brands.

ANTIMONY—A moderate business only is passing. Prices remain at 7 ¼ to 8 ¼c., as to brand.

TIN PLATE—Business of merely fair volume in American cokes is about the only business aside from ordinary small store trade of more or less retail character. Prices remain without important change.

IRON AND STEEL—Comparatively few contracts are being placed for large lots of pig iron, but small sales are more numerous and the bulk of business is at fairly steady prices. According to The American Manufacturer, 159 furnaces with a weekly capacity of 229,703 tons were in blast on Dec. 1st. The capacity a month previous was 219,638 tons. A year ago it was 141,410 tons. The authority above quoted estimates the production for the year 1897 at about 9,000,000 tons.

Other branches of the trade remain in about the same condition that they have been for some time past, with only fair business and little improvement in prices.

MANITOBA MARKETS.

WINNIPEG, Dec. 14, 1897.

THE weather here is still very mild. Business is good in almost all lines of cutlery, silverware, lamps, and in fact in anything in the hardware trade that is suitable for Christmas gifts. Skates are also in good demand, likewise hockey sticks. Speaking of sporting goods, Mr. Maurice Putnam, head of the Hingston Smith Arms Co., has just taken unto himself a wife, in the person of Miss Townley, of Woodstock, who visited here last summer. Both bride and groom have a large circle of friends here who will tender hearty congratulations when the happy couple return from their wedding trip. Mr. Beeler, manager of J. H. Ashdown's wholesale establishment, left last week on a trip through American cities. Mr. Beeler intends to combine business with pleasure.

The hide market here at present suits the seller better than the buyer. The price for all classes of frozen hides is 6½ to 7¼ c. per lb., while the price to shippers paid by eastern houses is only 9c. for picked hides. Certainly this is the year when the farmer has his innings, as everything he has to sell is a good price, while prices of what he has to

purchase, with the exception of a few lines, are no higher. Some slight change in price is noted for the week, there being an advance in rope and horseshoes, as appears in price list below.

Prices current are as follows :

Barb wire, 100 lbs.	\$2 60
Plain twist wire and staples.	2 75
Oiled annealed wire.	10 2 80
"	11 2 90
"	12 3 00
"	13 3 15
"	14 3 30
"	15 3 65
Wire nails, 30 to 60 dy, keg.	2 65
" 16 and 20	2 70
" 10	2 75
" 8	2 80
" 6	2 95
" 4	3 05
" 3	3 30
Cut nails, 50 and 60 dy	2 55
" 20 to 40	2 55
" 10 to 16	2 60
" 8	2 65
" 6	2 70
" 4	2 95
" 3	3 20
" 3 fine	3 50
Horse nails, 45 per cent. discount.	
Horse shoes, iron, light, medium and heavy, keg.	\$4 15
Snow shoes.	4 40
Steel, light.	4 40
" extra light.	6 00
Bar and band iron, \$2.10 basis.	
Swedish iron, \$5 basis.	
Tool steel, Black Diamond, 100 lbs.	8 00
Jessop	12 50
Sheet iron, black, 8 to 24 gauge, 100 lbs..	3 50
26 gauge.	3 75
28 gauge.	4 00
Galvanized American, 16 to 24 gauge.	4 00
26 gauge.	4 25
28 gauge.	4 50
Genuine Russian, lb.	12
Imitation	8
Tinned, 24 gauge, 100 lbs.	7 25
26 gauge	7 50
28 gauge	8 00
Tin plate, 1C charcoal, 20 x 28, box	8 50
" IX	10 50
" IXX	12 50
Canada plate, 18 x 24 and 18 x 24	3 25
Sheet zinc, cask lots, 100 lbs.	6 00
Broken lots.	6 50
Pig lead, 100 lbs.	4 25
Wrought pipe, black, 1/4 inch	2 50
" 3/8 inch	2 75
" 1/2 inch	3 00
" 3/4 inch	4 00
" 1 inch	5 00
" 1 1/4 inch	7 00
" 1 1/2 inch	8 50
" 2 inch	11 50
Over 2 inch	65 p.c.
Rope, sisal, 7-16 and larger.	7 00
" 3/4	7 50
" 1/2 and 5-16	8 00
Manilla, 7-16 and larger	8 25
" 3/4	8 75
" 1/2 and 5-16	9 25
Cotton, all sizes, lb.	15
Axes, per box	\$5.50 to 8 00
Screws, flat head, iron	85 p.c.
Round "	77 1/2 p.c.
Flat " brass	80 p.c.
Round " "	72 1/2 p.c.
Bolts, carriage	60 p.c.
Machine.	60 p.c.
Tire	55 p.c.
Sleigh shoe.	65 p.c.
Rivets, iron.	50 p.c.
Copper, No. 8, lb.	25c.
Spades and shovels.	40 p.c.
Harvest tools.	60 to 60-10 p.c.
Axe handles, turned, second growth, hickory, doz	2 50
No. 1.	1 50
No. 2.	1 25
Octagon extra.	1 65
No. 1.	1 25
Ammunition, cartridges, Dominion R.F.	50 p.c.
Dominion, C.F., pistol.	25 p.c.
" military	15 p.c.
American R.F.	35 p.c.
C.F. pistol.	p.c.
C.F. military.	5 p.c.

Loaded shells, Eley's 12 gauge, M.....	16	00
American, M.....	16	20
Robin Hood, M.....	18	00
Shot, ordinary, per 100 lbs.....	6	00
Chilled.....	6	50
Powder, F.F., keg.....	4	75
F.F.G.....	5	00
Robin Hood.....	10	00
Tinware, pressed.....	70	30
Granite ware, according to quality. 50 to 60	50	60

TRADE CHAT.

PERINE & CO.'S twine mill at Doon, Ont., was burned last week, causing a loss of over \$15,000, and throwing over 100 men out of work.

J. & L. Jones, hardware merchants, of Pembroke, have made an assignment to Mr. G. Delahaye, barrister.

Mr. J. C. McCormack, who is now lumbering on the Gatineau, has found a lode of magnetic iron, and he thinks there is gold in that district.

Extensive deposits of coal have been discovered at Dominion City, thirty miles from Winnipeg, at a depth of 100 feet. A company is being formed to develop the claims. The coal is of good bituminous quality.

The Perth (Ont.) Flax and Cordage Co. have recently received two shipments of rope-making machinery of the latest design,

BUSINESS CHANCE.

WANTED TO EXCHANGE ONE OR TWO good Farms in the Northwest for stock of Hardware Address Jas. W. Fullbrook, Stonewall, Man. (52)

SITUATION WANTED

WANTED SITUATION AS HARDWARE TRAVELLER for Manitoba and N. W. T.; 30 years' experience in the trade; thoroughly posted in Carriage and Saddlery Hardware; first-class reference. Address "Hardware," c.o. HARDWARE AND METAL, Toronto, Ont. (52)

FOR SALE.

THE BEST HARDWARE BUSINESS IN ON-
tario; no opposition; the best stand in town; stock
about five thousand. For further particulars address Box
D, **HARDWARE AND METAL.** (t f.)

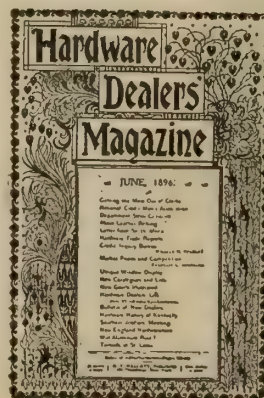
R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.



ONE
DOLLAR
A
YEAR

**Sample
Copy
Free**

D. T. Mallett
Publisher
271 Broadway
New York

and which Ald. Hogarth purchased in Paterson, N.J. The new machines have not yet been put in position, but it is expected that about the beginning of next year the factory will be in full operation.

The rails for the P. & P. J. Railway between Aylmer and Hull have all arrived and are now on the company's property at Aylmer. There were thirty-five carloads.

Between 20 and 30 river steamers are to be built at Victoria, B.C., this winter, including a steel steamer, which will operate on the Stickon, and two vessels for which the Hudson's Bay Company are calling for tenders.

A rich iron mine has been discovered two miles from West Duluth, and within easy reach of the harbor. The ore is of a magnetic variety, low in phosphorus, and minus the titanic acid that destroys the value of magnetic ore.

A common quart bottle filled with a saturated solution of common salt makes a cheap and efficient substitute for the ordinary hand grenade. The salt forms a coating on all that the water touches and makes it nearly incombustible.

The rusting of iron under paint is usually supposed to be due to minute cracks in the paint. A study of the subject by Edmund Simon shows that paint resists temperature changes, but is always hygroscopic, and when swollen by moisture readily admits water and gases. To prevent the rusting Herr Simon recommends three or four coats of very adherent paint containing the largest possible quantity of oil.

The New England Gas and Coke Company—composed of well known American capitalists—has signed a contract with the Dominion Coal Company, of Great Britain,

for the annual delivery of 800,000 tons of coal. The execution of this contract will about double the output of the company's mines, the present output amounting to something over a million tons. The contract is said to be for twenty years, and the Gas and Coke Company reserves the right to take 1,500,000 tons at the same figure. The mines will now be active all the year round. It is stated that this deal will almost double the amount of royalty paid for coal each year to the Nova Scotia Government.

The company which carries on the peat industry near Weiland has discovered a method of making marble out of gypsum and have already secured a patent. The gypsum is treated with a chemical solution which causes it to become crystallized, after which it can be worked with a turning lathe or chisel into all shapes. The subject has been brought before the officials of the Bureau of Mines. It is understood that the company is at present obtaining gypsum from the United States. It is stated that there is an abundant supply of the mineral on the Grand River. The new product is capable of taking a high polish, and cannot be distinguished from marble as far as appearances go.

WILL AGAIN TRAVEL IN CANADA.

Mr. W. C. Inglis, who up to about ten years ago traveled for Bertram & Co., wholesale hardware, Toronto, will again take the road for his old firm, or, rather, what is now Bertram, Wilson & Co. Since he left Bertram & Co., Mr. Inglis has been traveling for the Simmons Hardware Co., St. Louis, Mo., the largest wholesale hardware firm in the United States. Mr. Inglis' old friends in the trade will doubtless be glad to welcome him back.

KLONDYKE PREVARICATIONS.

He had just returned from the top of the Chilkoot Pass and was apparently glad of it.

"How was the weather when you left?" enquired a friend. "Cold?"

"Yes, but not so cold as it will be along in January, after the mosquitoes get out of the air and let the wind have a chance. Then it gets good and cold. A man told me who had wintered up there seven years that it was so cold in January that they froze the flames of the candles and sold them for strawberries. He said they kept their fires over night by putting them out in the air and letting them freeze and then thawed them out in the morning. He said he had seen four men die of colic from eating whiskey that was frozen so hard it wouldn't thaw inside of them. He said he knew a clerk in an hotel on the Yukon that got rich selling the diamonds he wore, said diamonds being nothing on earth but ice crystals that didn't thaw till after the clerk had got out of the country. He said he had seen a man fall off the roof of a barn and freeze so stiff before he lit that he broke in two when he hit the ground. He said he had seen smoke freeze in a chimney till the fire wouldn't draw, and he knew of one case where the smoke froze after it got a hundred feet up and fell back on the house, knocking a hole in the roof big enough to drive a yoke of steers through. He said the reason the nights were so long in that country was that the dark got frozen so hard that the daylight couldn't thaw its way through in less than six months. He said—"

"Excuse me," interrupted the friend, "did this party have affidavits with these statements?"

"He said he had, but I guess he must have frozen to death hunting for them, because he never came back when I asked him to go after them for me," and the returned Chilkooter smiled a smile that was childlike and bland.

"I am pleased to say that the 250 Rifleite which I have been using in the Miniature Ammunition for 303 Service rifle practice indoors, has given most satisfactory results. The strength is superior to any other smokeless powder I have ever used. There is almost no fouling, and what there is is of such a character as to be easily removed by drawing a rag through the barrel after using an indefinite number of rounds. It has no injurious effects on the barrel, and for uniformity I could not wish for anything better. The charge I use is $2\frac{1}{2}$ grains, giving nearly 6-inch penetration in pine at 50 yards. I hope to be able to report as favorably on the 303 when I can give it a fair trial with full Service charge on an open range."

Signed, F. H. HAYHURST,

Staff-Sergt. 13th Infantry.

The Smokeless Powder Co., Limited, Dashwood House, New Broad St.
LONDON, E. C.

WORKS—BARWICK, HERTS.

Wholesale Agents
for the Dominion

LEWIS BROS. & CO.

30 St. Sulpice St, MONTREAL.

MACHINERY AND MECHANICAL DEPARTMENT.

ELECTRIC CABS IN LONDON.

IN the month of August this year Mr. W. H. Preece inaugurated a service of electric cabs which are to ply for hire in the streets of London in competition with ordinary hackney carriages. Thirteen of these cabs are now ready for work, and a staff of drivers have been instructed in the use of them. The cabs will be let out by the proprietors, the London Electrical Cab Co., Limited., just at the same rates and in the same manner as the London cabs. The "cabbies" are, we are informed, quite enthusiastic about the new vehicle.

They are being taken out in parties on a special brake, and instructed in the management of the switches, steering gear, etc. In a short time 25 more cabs are to be added to the number now in use.

The new vehicle resembles very closely a horseless and shaftless coupe. It is carried on four wooden, solid rubber tired wheels. There is ample space for the coachmen. The accommodation within is luxurious. The propelling machinery consists of a three horse power Johnson-Lundell motor, with double-wound armature and fields, so that by a suitable switch or controller a variety of speeds can be obtained.

The controller is arranged so as on the first step to connect on two armature windings and two field windings of any series with small starting resistance. This is not a running speed, but is only intended to start the motor in motion. On the second step the windings are still in series, but the resistance cut out, and with this arrangement the cab runs at about three miles an hour. The third step places the armatures in parallel, but leaves the field in series, and with this arrangement the cab runs at about seven miles an hour. The fourth step places the field in parallel, and the cab runs at nine miles an hour. In the reverse direction from the stop position the series parallel controller on the first step short circuits the motor through the starting resistance, thereby gently breaking the forward motion of the cab. On the second step backward the motor is completely short circuited, bringing the cab to a dead stop, and the third step backwards reverses the connections between the armature and fields, all being in series to enable the cab to move at its slowest speed backwards. The whole of these movements are produced by the use of one lever placed at the side of the driver's box.

The current for the motor is supplied by storage batteries, which are at the bottom of the cab. There are 40 E.P.S. traction type cells, having a capacity of 170 ampere hours when discharging at a rate of 30 amperes.

The cabs can thus travel between 30 and 35 miles without being recharged. They are charged at the electric supply station of Juxon street, Lambeth, London. So far they have proved a success, with the exception that when a cabbie gets intoxicated the police have great trouble in stopping the vehicle, as they have to jump on in front in order to do so.

AN IN AND OUT SCREW DRIVER.

The Millers Falls Co., New York, are placing on the market an automatic screw driver for driving and withdrawing screws.



This driver, a cut of which we publish, is thoroughly made and highly finished. The handle is made from polished Cocobola wood, and the steel work is polished and nickel plated throughout. The set consists of the handle with right and left spirals; two double ends, one single end, and one forked blade, making six driving points in all. The forked blade is fitted for use upon bicycle spoke nipples.

THE PRESENT PRICE OF ALUMINUM.

The Aluminum World contains each month the latest price list for aluminum in all forms. Our readers will doubtless be interested in knowing the present quotations.

Aluminum ingots, guaranteed to be over 99 per cent pure, cost 40 cents a pound in small lots and 34 cents in ton lots. Aluminum guaranteed to be over 90 per cent. pure for alloying with iron and steel costs only 31 cents in ton lots. Special casting alloy containing over 80 per cent. pure aluminum for use in place of brass costs 27 cents a pound. Aluminum castings cost 45 cents and upward a pound. Aluminum bronze ingots containing 2½ per cent. of aluminum cost 13 cents a pound, while those containing 10 per cent. cost 16 cents.

Aluminum rods cost 53 to 55 cents a pound, and rolled squares and other sections, in orders of not less than 1,000 pounds at a time, \$1 a pound. Plate and sheet aluminum costs from 40 cents to \$2.90 per pound, while wire costs from 55 cents to \$4.80 per pound. Finely powdered alumi-

num for paint, printing and other purposes costs \$1.75 a pound.

Aluminum is now so cheap that it is used in many places as a substitute for brass.

RADICAL CHANGES IN GLASS.

As foreign shippers are averse to shipping glass in smaller lots than 50 boxes of 100 feet, importing merchants will confine themselves this season to orders of 5,000 feet and over.

Owing to insurance companies refusing to insure glass against breakage in transit through displacement of vessels' cargoes, wholesalers find the risk too great to guarantee glass to be in good order. Retailers will thus be compelled to run all risk of breakage from any cause whatever.

TIRE-PUMPING SLOT MACHINE.

A large number of bicycle manufacturers, dealers and devotees of the wheel of both sexes were given a private view in London, England, a few days ago of the new slot machine for the filling of exhausted tires, patents for which were recently issued. It is somewhat similar to the ordinary slot machines, but instead of producing candy, gum or music, it has a large reservoir filled with compressed air, which can be refilled as often as required in the store or saloon in which it may be stationed. An English penny, or two cents in American money, will cause the machine to part with sufficient compressed air to fill the largest-sized tire. The invention will be of incalculable value to cyclists, especially in the country districts, and orders for over 10,000 of the machines have already been received.

WILL AGAIN HANDLE THE PHOENIX

M. & L. Samuel, Benjamin & Co., of Toronto, will again handle the "Phoenix" bicycle, arrangements for next year's supply having just been completed. The Messrs. Samuel, Benjamin & Co. had remarkable success with these wheels last season, out of the large number they disposed of there being practically no complaints received. The parts the firm stocked in order to prepare for eventualities are still in the warehouse. The 1898 wheel shows some improvement compared with last season's pattern, but prices will be considerably lower, notwithstanding.

A Madoc, Ont., despatch, says: "The greatest activity is noticeable at the hematite mine, where a large number of hands are now employed. The water has been all pumped out of the mine, and 60 tons of the best grade is shipped daily from the station at Eldorado to Hamilton."

BRITAIN'S IMMENSE TRADE.

THE British Board of Trade has just issued an elaborate report on the naval expenditure and mercantile marine of different countries, from which the following figures are taken: The total value of British maritime interests at the present time is estimated at £2,000,000,000. The imports and exports of France by sea are estimated at £264,700,000, those of Russia at £72,800,000, and those of Germany at £404,700,000. A note explains that this last figure represents the total foreign trade by sea and land of the German empire. The value of the seaborne commerce proper of Germany was estimated in 1895 at only £150,000,000, and it is suggested that the correct figure now would be less than £200,000,000. The seaborne commerce of Italy is valued at £54,400,000, that of Spain at £54,300,000, that of Austria-Hungary at £20,000,000, and that of the United States at £332,400,000. The naval expenditure of Great Britain, as might be expected, is more than double that of any other country; but, if these figures are correct, it appears that the cost of the navy, regarded as insurance is only about 1 per cent. of the value of the interests involved, though it amounts to more than 20 per cent. of the aggregate revenue of the United Kingdom, which bears very nearly the whole of the burden. Thus New South Wales contributes £47,000 to the cost of naval defence out of an aggregate revenue of over £9,000,000, Victoria, £70,000 out of a revenue of over £6,500,000, New Zealand, £20,000 out of a revenue of nearly £4,500,000, the South African colonies nothing — except Sir Gordon Sprigg's offer of a first-class battleship — and the Dominion of Canada nothing; while out of an aggregate revenue of about £102,000,000 the United Kingdom spends £21,250,000 on the naval defence of the Empire.

BUSY ON CANADIAN ORDERS.

The Union Hardware Co., Torrington, Conn., whose advertisement has appeared in **HARDWARE AND METAL** for some time, are filling Canadian orders as fast as possible.

A representative of this paper called at their New York store this week and not a single pair of their best line of hockey skates was to be found in stock, while a great many American orders have not yet been filled.

The company is surprised at the extent of the trade in Canada for high-price goods, and other manufacturers have expressed the same opinion.

The impression seems to have got abroad that only cheap goods would sell in Canada,

and it is to be feared the wholesale houses are largely to blame for this state of affairs. Nothing can be gained by pushing a poor article because it is cheap. There is in

Canada a class of people who want the best, and are able and willing to pay the best price, whether it be for hockey skates or anything else.

Baylis Manufacturing Co.

16 to 30 Nazareth Street. MONTREAL

VARNISHES
WOOD FILLERS
OILS

JAPANS
WHITE LEAD
AXLE GREASE

LACQUERS
PAINTS
Etc.

WRITE FOR PRICES.



The Boar's Head

This is our registered Trade Mark and our name is stamped on every Painters' Brush we make. Painters recognize it now as meaning sterling value every single time. Hence it brings trade—the best kind—permanent trade.

Chas. Boeckh & Sons, Mfrs.
Toronto, Ont.

INSURE YOUR LIFE IN THE
CONFEDERATION LIFE ASSOCIATION

The right man

to fill a responsible place in business is the one who looks ahead and provides for future contingencies.

The right man

to have the responsibility for the welfare of his wife and family is he who makes provision for their comfort in case of his death.

The right man

knows that to insure his life is the only way to make such provision, and he knows that

The right policy

is the UNCONDITIONAL ACCUMULATIVE Policy of the

CONFEDERATION LIFE ASSOCIATION

It contains one condition only—that is the payment of the premium. Rates and full information will be sent on application to the Head Office or to any of the Agents of the Association.

HEAD OFFICE—TORONTO.

W. G. MACDONALD,

Actuary.

J. K. MACDONALD,

Managing Director.

ST. JOHN BOARD OF TRADE.

ON Monday of last week the St. John Board of Trade held their annual meeting, President Fisher in the chair, and a large number of St. John's leading business men present.

In the secretary's report of the business attended to by the Council during the month it was stated that the president had, at the request of the Council, spoken before the boards of trade in Toronto, Hamilton and London in the interests of the port of St. John, and had been heartily and encouragingly received. A circular had been sent to the various agricultural societies of New Brunswick to find out if there was a possibility of an increase in the production of pigs, in view of the proposed establishment of a pork-packing business in St. John, and a large number of favorable replies had been received. Arrangements had been made to obtain full statistical information of the winter port business, inward and outward. The Council had also under consideration matters relating to estates of insolvent debtors, investigations into causes of fires, pamphlet on harbor and port of St. John, proposed railway from Granville to Middleton, Canadian route to the Yukon, tonnage charge on vessels anchored in the stream, and inspection of grain, all of which are receiving attention.

The annual report of the council noted a gratifying increase in the board membership. Fitting tributes were paid to the

same rates from British ports to St. John as to Portland or Boston. The Government are expected to deepen the channel at the entrance of the harbor as soon as the survey has been made. The council had been assured that ample terminal facilities will be established at St. John.

The financial statement showed a balance to the credit of the board of nearly \$1,000.

President Fisher, in his annual address, spoke of his recent visit to the west. In Toronto seventy-five board of trade and other representative business men had very warmly and heartily responded to his appeal for their interest in the development of St. John as a winter port. He desired to impress on the board and the mayor of St. John the necessity of getting out a pamphlet on St. John and its advantages, as proposed previously. The board, though not able to bear the cost, should do all they could towards it, and the council should make a grant sufficient to cover all expenses. The question of a unitorm insolvency law for the whole Dominion, and the establishment in London, Eng., of a commercial bureau for Canada were attracting much attention in the west. He was glad Premier Emerson and the Provincial Legislature proposed to give some attention to immigration. One pulp factory would commence operations in the spring, and possibly another in the near future.

Officers were elected as follows: President, D. J. McLaughlin; vice-president, W. M. Jarvis; members of the council, W. S. Fisher, W. F. Hatheway, W. H. Thorne, John Sealy, S. Schofield, W. C. Pitfield, Thos. McAvity, J. A. Likely, H. A. Drury and Geo. Robertson, these to elect six others at their first meeting. Last year's board of arbitration was re-appointed, with the substitution of H. A. Drury in place of the late Robt. Cruikshank.

On motion of Mr. McLaughlin, seconded by W. M. Jarvis, the thanks of the board were tendered to W. S. Fisher for his valuable work for St. John on his recent western trip, and Mr. Fisher acknowledged the vote in fitting terms.

THE STAR HACK SAW FRAMES.

The accompanying cut is a representation of the "Star" hack saw frame, No. 14, which the Millers Falls Co., New York, are placing on the market. This frame is ten inches deep with twelve-inch blade and is intended for large work, such as cutting off

girders, beams, etc. This firm also make a smaller size, No. 13, seven inches deep with nine-inch blades, for finer work. These frames, especially No. 14, for large work, are receiving a great deal of attention from iron-workers, contractors, etc. Dealers will find it to their advantage to keep samples of these goods in stock.

SOME POSSIBILITIES IN SPARE MOMENTS.

Dost thou love life? Then do not squander time, for that is the stuff life is made of.—Franklin.

Every hour in a man's life has its own special work possible for it, and for no other hour within the allotted span of years, and once gone it will not return.—Noel Paton.

A man that is young in years may be old in hours, if he have lost no time.—Bacon.

There is not an hour of youth but is trembling with destinies—not a moment of which, once past, the appointed work can ever be done again, or the neglected blow struck on the cold iron.—Ruskin.

Lost! Somewhere between sunrise and sunset, two golden hours, each set with sixty diamond minutes. No reward is offered, for they are gone forever.—Horace Mann.

"What is the price of that book?" at length asked a man who had been dawdling for an hour in the front store of Benjamin Franklin's newspaper establishment. "One dollar," replied the clerk. "One dollar," echoed the lounge; "can't you take less than that?" "One dollar is the price," was the answer.

The would-be purchaser looked over the books on sale awhile longer, and then inquired: "Is Mr. Franklin in?" "Yes," said the clerk, "he is very busy in the press-room." "Well, I want to see him," persisted the man. The proprietor was called, and the stranger asked: "What is the lowest, Mr. Franklin, that you can take for that book?" "One dollar and a quarter," was the prompt rejoinder. "One dollar and a quarter! Why, your clerk asked me only a dollar just now." "True," said Franklin, "and I could have better afforded to take a dollar than to leave my work."

The man seemed surprised; but wishing to end a party of his own seeking, he demanded: "Well, come now, tell me your lowest price for this book." "One dollar and a half," replied Franklin. "A dollar and a half! Why, you offered it yourself for a dollar and a quarter." "Yes," said Franklin coolly, "and I could better have taken that price than a dollar and a half now."

The man silently laid the money on the counter, took his book and left the store, having received a salutary lesson from a master in the art of transmuting time, at will, into either wealth or wisdom.

Time-wasters are everywhere.

"I have been wondering how Ned contrived to monopolize all the talents of the family," said a brother, found in a brown study after listening to one of Burke's speeches in Parliament; "but then I remember, when we were at play he was always at work."—Pushing to the Front.



memory of Robert Cruikshank and Ira Cornwall. The proposed insolvency legislation, the lifeboat service, the assessment law, the commercial travelers' tax, the efforts to better advertise the port, President Fisher's visit to England and the Upper provinces, the maritime board meeting, the question of opening the port of Belfast to the cattle trade, the load line question, the steamship subsidies, tourist matters and others that had occupied attention during the past year were also briefly touched upon.

The St. John Board of Underwriters had expressed their willingness to accept the

AMONG THE RETAILERS.

Attracted the Children.

This week I had the good fortune to be on hand at the opening of a window that literally blocked the street with children. Though not in a hardware store, the display was one that will undoubtedly be fertile with ideas for attention attracting. A large number of children were congregated in front of a hardware store on Spadina avenue, Toronto, on Wednesday, about 4 o'clock, waiting for the blinds of the store to be raised. Inside the store I was informed there was to be an exhibition by two boys dressed to represent the notorious "Yellow Kid." The front of the window had dolls, horns, small horses, in fact toys of all descriptions, suspended from the ceiling. At the back was a platform about 4 feet by 6, in which were to be placed two boys. The crowd had kept increasing in front of the store till the policeman, who had endeavored to keep order, asked, in desperation, that the show be started. In about a quarter of an hour after the

blinds were pulled up the children desiring to see the show had covered the wide walk in front of the store and were even standing in the muddy roadway. The youngsters who were acting the part of the famous "kid" in the window, were of the right stamp, making much fun for the children, yet continually drawing attention to the toys hung up in the window. A blackboard was furnished them, and they made use of it to "guy" the policeman and others, and to advertise the goods in the window.

A Good Cutlery Display.

Robt. Fair, 290 Queen street east, Toronto, has in one of his windows this week an excellent display of cutlery. The door of his store is in the centre of the building and five or six feet from the front of the store. The windows run from the door direct to the sides of the building, thus creating a triangular space in each window for display. The floor of one of these windows is covered with table cutlery, a carving set in a neat, satin-lined box being placed in

the centre of the background, with other carving knives, table knives, forks, spoons, etc., placed in little circles and rows around it. A plate glass shelf runs along the back and the side of the window about a foot above the floor. The shelf at the back contains a large range of scissors and shears, and the shelf at the side displayed many sizes and varieties of razors. Above this latter shelf are two shelves on both of which are pocket knives, etc. Still higher, skates are hung up on brass rods running parallel with and close to the wall. There are some hardware firms who do not push for a share of the Christmas trade, but Mr. Fair is not one of them. He says he always pushes for, and gets, a fair share of Christmas trade.

Trade Outlook.

The open weather of the past few weeks in Toronto has kept trade somewhat dull, there being very little movement in general household goods. Glass and cutlery have been selling fairly well. The general opinion is that a few weeks of good, stiff, cold weather will create a brisk trade in skates and other outdoor sporting goods, cabinet hardware, and a general improvement in business.

THE RAMBLER.



SENTIMENT VS. BUSINESS.

AN ENGLISH OPINION OF THE FRANCO-RUSSIAN ALLIANCE.

John Bull, "Is it not strange, my dear Madam, that while he, who only takes 9,000,000 francs of your produce, should be your bosom friend, I, who buy sixty times as much, get nothing but abuse!"—Punch.

[Le Soleil, of Paris, France, says: "Whereas Russia bought 9,769,000 francs worth of produce from France for the first six months of 1897, England bought 590,000,000 francs worth."]]

THE LUMBERMEN'S CASE.

THE following is the memorandum presented to the Ontario Government by the deputation of lumbermen on Friday, 10th December :

Toronto, December 10, 1897.

To the Honorable the Attorney-General and his colleagues :

The importance of the question to all lumbermen in western Ontario is our justification for again waiting on you to present our views and ask for your favorable consideration to the resolution passed by a representative meeting of lumbermen held at Toronto, October 6, where it was declared to be in the public interest "that when new licenses are issued after April 30, 1898, a regulation be included in every license that all timber cut on the Crown lands of Ontario shall be sawn, made into square timber or otherwise manufactured in Canada."

We deem the present an opportune time for now offering you some reasons why we ask your Government to take this course.

1. The retaliatory clause of the Dingley bill passed by the United States has made it difficult for the Dominion Government, without grave hardship and dislocation of trade being threatened, to place an export duty on saw logs.

2. Under present conditions of free logs for export and a duty of \$2 per thousand feet, sawing on the Georgian Bay for the American market could not be continued; the business of sawing lumber would, of necessity, be transferred to Michigan.

3. This would affect not only Canadian operators, but also Americans who have established their saw mills in Ontario, and who are certainly entitled to consideration.

4. It would be a ruinous policy to provide the raw material free from our forests for competition against our own mills, who would be handicapped by the \$2 duty.

5. If the exportation of logs cut on Crown lands was entirely stopped Canadian lumbermen would enter no complaint of the \$2 duty, considering it entirely a matter under the jurisdiction of the United States.

6. While fully recognizing the rights of proprietorship, both of Canadians and Americans, in all licenses issued by the Crown, we consider the retaliatory clause an interference with our rights, and as Americans have induced the situation it is for them to apply the remedy.

7. What Canadian lumbermen want is simply equality and fair play in the work of utilizing the product of their own forests.

8. If a duty of \$2 is charged on lumber entering the United States, then an equal export duty should be charged on logs.

9. Until the privileges contemplated by clause 7 be enjoyed, the only remedy is to

prohibit the export of logs cut on Crown lands and place American stumpage owners on the same footing as Canadians.

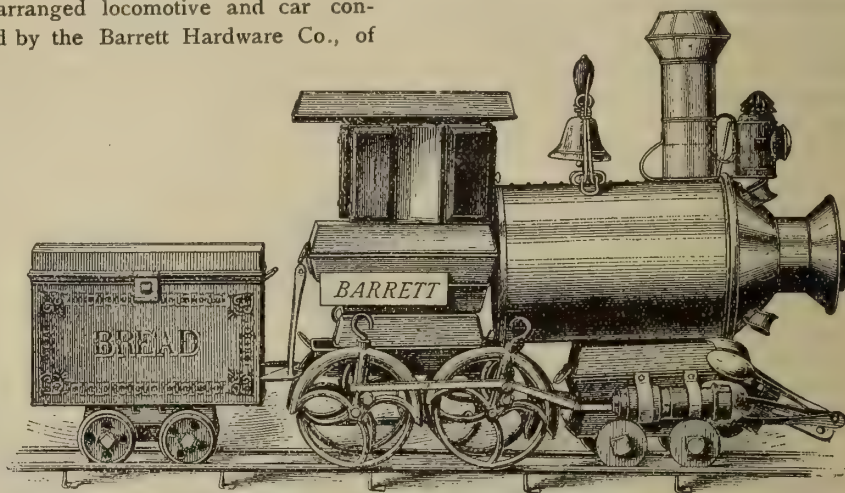
10. Whenever, therefore, an equalization of conditions is brought about the embargo placed on the export of logs could be taken off.

This statement was signed by Messrs. J. Scott, Huntsville Lumber Co., N. Turnbull, secretary; E. W. Rathbun, Wm. Irwin, John Bertram, Thos. M. Sheppard, the Imperial Lumber Co., C. D. Warren, president; J. & T. Conlon, James Playfair, W. J. Sheppard, Chew Bros., Burton Bros. and J. S. Playfair, on behalf of the deputation.

The Premier promised careful consideration.

LOCOMOTIVE AND CAR.

The accompanying cut shows an ingeniously arranged locomotive and car constructed by the Barrett Hardware Co., of



Joliet, Ill., for display in their show window. The articles used in building the locomotive, fig. 1, were as follows : The boiler was an 8-gallon milk can ; smokestack, two 2-quart tin cups with two pint basins on top ; headlight, a police lantern, bell, a hand bell ; boiler rests, deep drip pans ; axles, 1-inch machine bolts ; front wheels, 1-inch cast washers ; driving wheels, well wheels ; cow-catcher, basting spoons ; piston, 2-foot rule ; steam cylinder, a 2-inch nipple with a cap on one end and bushing on the other. The cab was made up of four deep roasting pans, folding lunch boxes, with a shallow drip pan on the top for the cover ; tender, a bread box on four hay carrier wheels ; $\frac{5}{8}$ -inch bolts for axles, with babbitt metal resting on the axles to carry the bread box. T barn door rail answered for track. The car had wheels composed each of four elbows, with 6-inch stovepipe shoved through them for axles, while a pipe collar at each end gave an artistic finish. On this car was piled stovepipe. The articles chosen for the construction of this train, especially

for the locomotive, were admirably adapted to their purpose. The exhibit attracted a great deal of attention and elicited much favorable comment.

A PRIZE-WINNING HARDWAREMAN

A. C. Leslie & Co., Montreal, a few weeks ago, through **HARDWARE AND METAL**, offered a prize to the best composed advertisement bearing on the merits of the "Queen's Head" brand of galvanized iron. They have had several replies from competitors extending from one end of the Dominion to the other. After due consideration by the above firm the honor fell on an old Pictou boy, in the person of Mr. W. J. Carter, of Carter Bros., hardware merchants, who has always taken great pride in this branch of their business.

Mr. Carter has spent the whole of his life behind a hardware counter, having started

when only 12 years old. In 1882 he branched out for himself, and to-day has one of the leading hardware stores between Toronto and Montreal. He has always been a great believer in advertising, and it is through his painstaking in the past in this department of his business he has done honor to himself in this instance. **HARDWARE AND METAL** congratulates Mr. Carter on his success. He also told our representative he could not possibly get along without **HARDWARE AND METAL**, as it was always the first paper read when it arrived.

LONDONDERRY IRON CO.

The Londonderry Iron Co., Londonderry, N.S., are advertising their extensive properties and works for sale. Their properties consist of about 30,000 acres of mineral land and other mining rights, two completely equipped blast furnaces, two ore calcining kilns, 67 coke ovens, a large rolling mill, a pipe foundry, a general foundry, a well-equipped machine shop, about twelve miles of railway with four locomotives, cars, etc., numerous houses and all the plants incidental to the production of iron on a large scale.

Emery and Hardware Specialties
COOKE HARDWARE CO.
 HAMILTON, ONT.

McDONALD & ALLEN
 KINGSTON

Manufacturers of

**Door Knobs, Japanned, Nickel, Silver and
 Bronze Plated and Real Bronze.**
 Sold by all Jobbers.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.
 Ingersoll - Ontario.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays 10 cents to any address on receipt of

HARDWARE AND METAL, Toronto

.. ISLAND CITY ..

Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
 188 and 190 McGill St., MONTREAL.

WORKS: 274 St. Patrick St., MONTREAL.

**The Niagara Falls
 Metal Works Company, Limited**
 Niagara Falls - Ont., Canada
MANUFACTURERS

Brass Foundry, Brass Finishing,
 Light Drop Forging, Malleable
 Iron Foundry, Wire Chains,
 Safety Chains, Plumbers' Chains,
 Cut Link Steel Chains. Articles
 cut, formed and stamped from
 Sheet and Band Steel, Iron, Brass,
 Copper, German Silver and Alu-
 minum. Close Plating and Elec-
 tro-Plating.

STEAMING WINDOWS.

Steaming windows result from the condensation of moisture in warm air upon cold glass. Considered in the abstract, says a London, England, paper, it is clear that there are several ways of preventing the phenomenon in question. One is to keep the air in the windows cool, another is to make the glass warm. Practical men, however, see difficulties in both cases, especially in the latter. No feasible method of warming and keeping warm panes of glass without at the same time making even warmer the circumambient air has yet been devised. Moreover, it is obvious that to warm the outside of windows it would be necessary to warm the street—a somewhat large order. Accordingly, we have to fall back upon the plan of keeping the atmosphere inside the windows as cool as possible. This can only be done by abundant ventilation, sufficient to keep the air practically as cool as the inside of the glass. Of course, the use of lights which, like electric lamps, give out but little heat, simplifies the procedure. It is desirable to light up windows early, beginning with the lights low, so that the air may be gradually heated. It is said that the application of glycerine to the glass has a good effect, and we see no reason why this should not be the case. But the main question must always be one of ventilation. You can no more make hot damp air abstain from condensing on a cold surface than you can make water run up hill.

DON'TS.

The EMPLOYER says:

Don't be late in coming in the morning; regularity is one of the things I insist on

Don't take more than an hour at dinner time; be back as the clock strikes the hour.

Don't allow a customer to go away unserved, when it is evident he is a buyer.

Don't neglect to offer a customer a chair. Never allow a lady to remain standing at the counter.

Don't fail to send out purchases when bought.

Don't neglect the counter.

Don't make an error in the price of any article you are selling.

Don't forget to add the cost of material when charging up a repair.

Don't neglect the "goods wanted" book.

Don't omit to introduce novelties to suitable customers; these always require showing; they never sell themselves.

Don't allow the windows to be neglected or the articles in them to become unsalable.

The SALESMAN says:

Don't expect us to be punctual in the morning if you keep us half an hour overtime in the evening.

Don't expect us back in an hour if we cannot tell when we leave home in the morning what time we shall be able to leave. If the time can be relied upon our dinner will be ready in time.

Don't neglect to order stock when it is required, otherwise customers cannot be served.

Don't neglect to provide clean and inviting seats for your customers and never allow the shop floor to be dirty and unswept.

Don't allow the staff of errand boys to be too small. Prompt delivery of parcels is important.

Don't make it necessary for the store to be left by having too few hands.

Don't allow any article to be unmarked that the clerks have to sell.

Don't expect us to remember the cost of material unless it is properly listed.

Don't omit to order articles entered in the "goods wanted" book.

Don't expect us to sell novelties unless a suitable stand for this purpose be always at hand, well filled with clean and perfect samples.

Don't grudge the time spent in window dressing, for it is the tradesman's most profitable advertisement.

—London Ironmongers' Chronicle.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.



VanTuyl & Fairbank

Petrolia, Ont.

Headquarters for ..

**Oil and Artesian Well
 Pumps, Casing, Tubing,
 Fittings, Drilling
 Tools, Cables, etc.**



**BROOM AND CORDAGE
 WORKS.**

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
 and Rope Halters, Rope Cattle Ties
 Cordage and Twines.

LONDON



IRON FENCING

and all kinds of

**Iron, Wire and Brass
 Work**

Address—

Toronto Fence and
 Ornamental Iron Works

(Joseph Lea, manager)

ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
 Piano Stool Feet, Novelties, etc. Bicycle Work
 a specialty. Special attention given to Job
 Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.

Quotations gladly given.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded
 Spring. "The Latest and Best." Sold
 by all Leading Jobbers in Canada.



"JARDINE" TIRE UPSETTERS WILL UPSET TIRES

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

A. B. JARDINE & CO.
HESPELER, ONT.

Plumber and Steam-Fitter

TIGHT SERVICEABLE JOINTS.

FROM Paterson, N.J.—Will the Metal Worker please inform me if it is proper to use a rubber washer on a coupling under the ground? I have been informed that it is not, because in time, it is said, the washer will rot out. I would also like to know if when a coupling is screwed up tight and water is turned on it is found to sweat a little between the coupling and the solder, it is liable in time to cause any noticeable trouble? This last trouble has occurred several times, and I have formed the opinion that it would make up tight, as I think the sweating is caused by contraction in the pipe owing to the cold water being turned on.

Note.—It has generally been considered that all joints under the ground should be made without the use of washers of any kind, as the best material is liable to rot out in time and permit leakage. If the leak in the second case presented is in the coupling proper it should be screwed up tight enough, so that the leaking cannot occur. If there is a leak through the solder it shows that the material on which the joint has been wiped has not been properly tinned and prepared before wiping, and it also shows that either the solder used in the wiping is too coarse for the work or the joint has not been wiped quickly enough; consequently the joint is not as solid as it should be. If the water seen is due to condensation it would show all along the pipe that is exposed to the air.—The Metal Worker.

PLUMBING AND HEATING NOTES.

Halifax people are discussing the advisability of having a large and thoroughly up-to-date hotel built to attract tourists to their city.

The Rat Portage Miner states that J. L. Wells, hardware merchant and plumber, Winnipeg, intends settling down in Rat Portage.

The Annapolis Town Council have recommended the institution of a partial sewerage system at a cost of \$13,500. The estimated cost for a complete system was \$26,000. It also proposed to invest \$12,000 in an electric lighting plant.

At present there are 509 licensed master plumbers in the city of Brooklyn, which,

added to eleven hundred in New York City and another hundred in Long Island City and the territory included in the domain of the Greater New York, will make about seventeen hundred hustling at the trade as employing plumbers in Greater New York.

PLUMBING AND HEATING CONTRACTS.

Guest & Co., Toronto, have plumbing contracts for two houses for Mr. Hugh Blain, Cumberland street, Toronto.

Geo. Woodburn & Co., of Montreal, have received the contract for plumbing, ventilating and gas-fitting three houses for Mr. Wilkinson.

The Bennett & Wright Co., Limited, Toronto, have contracts for the heating and plumbing of a hotel for the Bush estate on King street, Toronto.

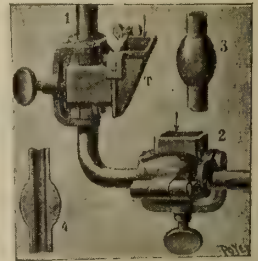
J. H. Gardner & Bro., of Montreal, have secured the contract for the plumbing, heating and ventilating four houses for Mr. J. Collins, and the plumbing, heating and ventilating one house for Mr. John Quinlan.

MOULDS FOR SOLDERING PIPE.

R. D.

The apparatus represented in the accompanying illustration consists of a bronze mould formed of two pieces opening with a hinge, and which is fitted either horizontally or vertically to the extremity of the two lead pipes that it is desired to join together. The joint completed by this apparatus is to take the place of the wiped joints so universally used by plumbers, it occupying less time to complete and considerably reducing the

labor. For vertical pipes a special hopper is provided. It is necessary to prepare the pipes in the same manner as those to be wiped by scraping them carefully. Then the mould is heated and fixed to the latter. After this the molten lead, which has been raised to a red heat, is poured in. In this way there is obtained a clean joint without any burrs.



It is remarkable that only lead is employed, instead of the soft solder used with the soldering-iron and lamp.

These moulds, the invention of Mr. M. Tye, permit of soldering more rapidly and surely than with the ordinary process, and of effecting a considerable saving, resulting from the difference in cost of the materials employed and the diminution in manual labor. These apparatus are made in several series, varying according to the external diameter of the pipes.

They can, according to La Nature, be arranged for uniting pipes of different diameters, and for soldering pipes at right angles and either horizontal or vertical.

AMERICAN CAST-IRON PIPES.

Mr. Walter Wood, of R. D. Wood & Co., Philadelphia, who was in this country a few weeks ago, has crossed over, stayed a few days only at home and is now back on this side. When he was here before he managed to secure a portion of the Glasgow order, and a lot of 800 tons for Axbridge,

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power)

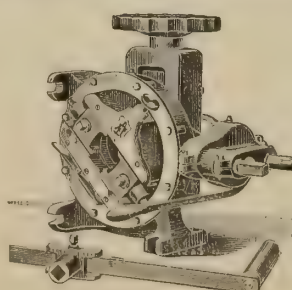
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office:
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

T. L. Paton.

30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by **The Mica Boiler Covering Co., Ltd.**, also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

**SMALL
RUBBER
GOODS**

**MOULDED
RUBBER
GOODS**

BOILER GASKETS

H.O. CANFIELD ~ BRIDGEPORT, CT.

Hardware, Plumbers' and Bicycle Specialties.

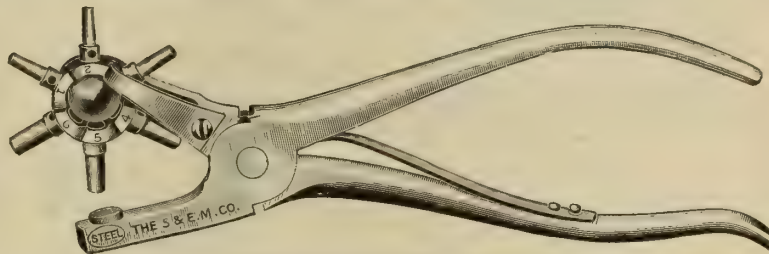
OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897

CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian **HARDWARE**
AND **METAL**.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

Somerset. He is now hunting for other orders, and will go very near getting some of them unless our Scotch friends can underbid him. A lot of 125 tons of American cast-iron pipe is coming over in the Michigan, now about due or here, for use in London.—Ironmonger, London.

MONTREAL MASTER PLUMBERS.

The following are the new officers of the Master Plumbers' Association of Montreal and vicinity for 1898:

Hon. President—John Date.
President—J. W. Harris.
1st Vice-President—Fred. Hortan.
2nd Vice-President—E. Lesperance.
3rd Vice-President—Richard Egan.
Secretary—Geo. C. Denman.
English Corresponding Secretary—W. M. Briggs.
French Corresponding Secretary—Arthur Martin.
Financial Secretary—Jos. Montpetit.
Treasurer—John Watson.
Executive—P. C. Ogilvie, chairman Sanitation Committee; Jos. Lamarche, chairman Arbitration Committee; D. Gordon, chairman Legislation Committee; Thos. Moll, chairman Apprenticeship Committee; Jas. A. Sadler, Auditing Committee.

OFFICIAL REPORT OF THE CONVENTION.

The report of the second annual convention of the National Association of Master Plumbers, etc., which was held this year in Toronto, has been issued by the executive.

It contains stenographic reports of the speeches delivered, also full details regarding bylaws, resolutions, etc., passed, the officers elected, etc. Half-tone photographs of Joseph Lamarche, Montreal, past president; Joseph Wright, Toronto, president; Wm. Smith, London, vice-president; Wm. Briggs, Montreal, treasurer, and Wm. Mansell, Toronto, secretary.

PERSONAL MENTION.

Mr. Fred Hatch, hardware merchant, was in Toronto on Thursday on one of his periodical buying trips.

Mr. Clarence Booth, manager of the Booth Copper Co., Toronto, left this week for Detroit, where he takes the management of the Steel Bath Manufacturing Co., a position formerly held by his brother, W. E. Booth, who recently moved to Chicago.

Mr. James Davidson, president of the Thomas Davidson Manufacturing Co., Limited, Montreal, accompanied by Mrs. Davidson, is making a tour of Manitoba, British Columbia, California and the Southern States. They are expected to return by Christmas.

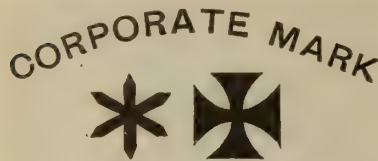
MUST SMELT THE ORE IN CANADA.

The Canadian Copper Co., an Ohio concern, and the Anglo-American Iron Co., which controls the output of the nickel and

copper mines around Sudbury, Ont., were, it is said, given special acts domiciling them in Canada on certain conditions, one of which was the establishment of smelting works for the reduction of the ores. It is claimed that in breach of that they have taken their ore to the United States and had it smelted there, and that they have spent in wages and railway freight about \$1,250,000 a year in this way outside of Canada. Mr. B. B. Osler, Q.C., of Toronto, a few days ago filed in the Department of Justice a petition to the Attorney-General of Canada for leave to bring an action against these companies to revoke their charters.

REMEDY FOR NAIL WOUNDS.

An exchange gives the following, which may be of use to our readers: Every little while we read in the papers of someone who has stuck a rusty nail in his foot, knee, hand or some other portion of the body, and that lockjaw resulted therefrom, of which the patient died. If every patient was aware of the remedy for all such wounds and would apply them all such reports would cease. The remedy is simple, almost always on hand, can be applied by anyone, and, what is better, it is infallible. It is simply to smoke the wound that is inflamed with burning woollen cloth. Twenty minutes' of the smoke of wool will take the pain out of the worst case of inflammation arising from a wound.



JOSEPH RODGERS & SONS, Limited.

MANUFACTURERS OF

Pocket and Table Cutlery, Scissors, Razors, Erasers, Etc.

These goods have fully maintained their reputation as the best cutlery in the world for over

ONE HUNDRED AND FIFTY YEARS.

Any Infringements of our Name and Corporate Mark will be promptly prosecuted.

Sole Agents for Canada,

JAMES HUTTON & CO.,

Montreal

CURRENT MARKET QUOTATIONS.

TORONTO, Dec. 17, 1897. $\frac{5}{8}$ inch and thicker..... 1 75

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

Tin.

Lamb and Flag—
56 and 28 lb. ingots, per lb. 0 16 0 16 1/4
Straits 0 16 0 16 1/4

Tin Plates.

Charcoal Plates—Bright.

M.L.S., equal to Bradley. Per box.
I.C., usual sizes \$5 00
I.X. 6 25
I.X.X. 7 50
J.R. & Co.—
I.C. 4 75 5 07
I.X. 6 00 6 25
I.X.X. 7 25 7 50

Famous—
I.C. 5 00
I.X. 6 25
I.X.X. 7 50
Raven & Vulture Grades—
I.C., usual sizes 3 25 3 50
I.X. 4 00 4 25
I.X.X. 4 75 5 00
L.A.X. 5 50 5 75
D.C., 12 1/2 x 17 2 75 3 00
D.X. 3 50 3 75
D.X.X. 5 50 5 75

NOTE.—Other brands might be shaded by 25c per box.

Coke Plates—Bright.

Bessemer Steel—
I.C., usual sizes 2 90 3 00
I.C., special sizes, base 3 05 3 15
20x28 6 00 6 25

Charcoal Plates—Terne.

Dean or J.G. Grade—
I.C., 20x28, 112 sheets 6 00
I.X. 7 50
I.C., Terne Tin 6 00
I.X., Orion 7 50

Charcoal Tin Boiler Plates.

Cookley Grade—
X.X., 14x56, 50 sheet bxs }
" 14x60, " } 0 05 1/4 0 06
" 14x65, " }

Tinned Sheets.
72x30 up to 24 gauge 0 05 1/4 0 06
" 26 0 06 1/4 0 06 1/2
" 28 0 07 0 07 1/4

Iron and Steel.

Common Bar, per 100 lbs 1 50
Refined " 1 80
Horse Shoe 1 80
Band 1 85
Hoop " 4 25
Swedish 4 00
Sleigh Shoe Steel 2 50
Tire Steel 2 50
Machinery 2 75
Cast Steel, per lb 0 10
Russian Sheet, per lb 0 10 1/2
Tank Plates, 1-5 and thicker. 2 00
Boiler Rivets 4 50

Boiler Tubes.

1 1/2-inch 0 06 1/2
2 " 0 07 1/2
2 1/2 " 0 09 1/4
" 0 11

Steel Boiler Plate.

3-16 inch 2 00
" 1 90

Sheet Iron.

16 gauge and heavier 2 50 2 70
18 to 20 gauge 2 25 2 50
22 to 24 " 2 25 2 35
26 " 2 35 2 45
28 " 2 45 2 55

Canada Plates.

All dull, 52 sheets 2 25
Half polished 2 35
All bright 3 00

Iron Pipe.

Wrought, 1/4 to 3/4 inch, \$2.00; 1/2 inch, \$2.35;
3/4 inch, \$2.87; 1 inch, \$3.87; 1 1/2 inch,
\$5.10; 1 1/2 inch, \$6.38; 2 inch, \$9.25 per
100 feet.
Galvanized, 1/2 inch \$4 to \$4.25, 3/4 inch \$4.80
to \$5, 1 inch \$6.75 to \$7, 1 1/4 inch \$9.25 to
\$9.62 1/4, 1 1/2 inch \$11.75 to \$12.25 per 100
feet.
Cast, soil, 2, 3, 4 and 5 inch, 60 and 10 p. c.

Galvanized Iron.

Queen's Head or equal grades in case lots:
Per lb.
16 gauge 0 03 1/4
18 to 24 gauge 0 03 1/4
26 " 0 04 1/4
28 " 0 04 1/4

Chain.

oof Coil, 3-16 in., per 100 lbs 5 50 6 00
" 1/4 " " " 4 75
" 5-16 " " " 4 00
" 3/8 " " " 3 75
" 7-16 " " " 3 35
" 1/2 " " " 3 25
" 9-16 " " " 2 95
" 5/8 " " " 2 85
" 3/4 " " " 2 75

Trace, per doz. pairs 3 60 5 90
German coil, per 100 ft. 1 65 2 70
Jack chain, iron, single, per
doz. yards. 0 13 0 50
Jack chain, double, per doz.
yards 0 15
Jack chain, brass, single, per
doz. yards. 0 20 10

Copper.

Ingot.
English B.S., ton lots 0 12 0 12 1/4
Lake Superior 0 12

Bolt or Bar.

Cut lengths, round, 1/2 to 3/4 in. 0 20 0 22
" round and square
1 to 2 inches 0 18 0 19
NOTE.—Complete, lengths about 15 feet
from 3 to 5 cents a pound.

Sheet.

Untinned, 14 oz., and light, 16
oz., 14x48 and 14x60 0 15 0 16
Untinned, 14 oz., and light, 16
oz., irregular sizes 0 15 0 16 1/2
NOTE.—Extra for tinning, 2 cents per
pound, and tinning and half planishing 3
cents per pound.
Planished and tinned, 14x48
and 14x60 0 25 0 27

Braziers. (In sheets.)

4x6 ft. 25 to 30 lbs. ea., per lb. 0 17 0 19
" 35 to 45 " 0 15 1/2 0 16 1/2
" 50 lb. and above, " 0 15 0 16
Boiler and T.K. Pitts.
Plain Tinned, per lb 0 21
Spun, per lb 0 25

Wire.

Pure, in coils—
From 1 to 20 gauge, 12 1/2 p. c. off list.
From 20 gauge up, 12 1/2 p. c. off list

Brass.

Roll and Sheet, 14 to 30 gauge, 25 to 30 p. c.
off list.
casts, hard-rolled, 2x4 0 20

Zinc Spelter.

Foreign, per lb 0 04 1/4 0 05
Domestic " 0 03 1/4 0 04

Zinc Sheet.

5 cwt. casks 0 05 1/4
Part casks 0 05 1/2

Lead.

Imported Pig, per lb 0 04
Domestic, per lb 0 03 1/2
Bar, 1 lb. 0 05
Sheets, 2 1/2 lbs. sq. ft., by roll. 0 05 1/2 0 06
Sheets, 3 to 6 lbs., per sq. ft.,
by roll. 0 05 0 05 1/2

NOTE.—Cut sheets 1/2 cent per lb. extra.
Pipe, by the roll, usual weights per yard, lists
at 7 cents per lb. and 27 1/2 per cent. discount.
NOTE.—Cut lengths, net price, waste pipe
in 8-ft. lengths, lists at 7 1/2 cents.

Solder.

Per lb. Per
Bar half-and-half 0 11 0 11 1/2
Standard 0 10 1/4 0 11
Wire 0 17 0 19

NOTE.—Prices of this graded according to
quantity. The prices of other qualities of
solder in the market indicated by private
brands vary according to composition.

Antimony.

Cookson's, per lb 0 09 0 09 1/2
Other makes, per lb. 0 08 0 08 1/2

Anti-Friction Metal.

Per lb.
"Beaver" brand \$0 20
"Tandem" A 0 19
" B 0 16
" C 0 10 1/4

White Lead.

Per cwt.
Pure, Assoc. guarantee, ground in oil,
25 lb. irons 5 50
No. 1 do 5 22 1/2
No. 2 do 4 75
No. 3 do 4 37
No. 4 do 4 00
Brandram's B.B. Genuine 7 50
f.o.b. Halifax, St. John, Montreal, Toronto
James' genuine 6 70
" No. 1 6 20

Prepared Paints.

(In 1/4, 1/2 and 1 gallon tins.)
Pure, per gallon 1 00
Second qualities, per gallon 0 90
Barn (in bbls.) 0 70 0 90
Sherwin-Williams 1 20

Colors in Oil.

(25 lb. tins, Standard Quality.)
Venetian Red, per lb 0 07
Chrome Yellow 0 11
Golden Ochre 0 06
French 0 05
Marine Black 0 09
Green 0 09
Chrome 0 08
French Imperial Green 0 13

Colors, Dry.

Yellow Ochre (J.C.) bbls. pe
cwt 1 35 1 40
Yellow Ochre (J.F.L.S.), bbls.
per cwt 2 75
Yellow Ochre (Royal), per
cwt 1 10 1 15
Venetian Red (best), per cwt. 1 80 1 90
English Oxides, per cwt. 3 00 3 25
American Oxides, per cwt. 1 75 1 90
Canadian Oxides, per cwt. 1 75 1 90
Burnt Sienna, pure, per lb. 0 10
Umber, " 0 10
do. aw 0 09
Drop Black, pure 0 08
Chrome Yellows, pure 0 18
Chrome Greens, pure, per lb. 0 12
Golden Ochre 0 03 1/4

Ultra marine Blue in 28-lb.
boxes, per lb. 0 08
Fire Proof Mineral, per 100 lb. 1 00
Genuine Eng. Litharge, per lb 0 07
Mortar Color, per 100 lb. 1 25
James' Gen. Red Lead, 100 lb 0 04 1/4
Pure Indian Red, No. 45, lb. 0 08
Whiting, per 100 lb. 0 50

Paris Green.

Casks
50-100 lb. kegs.
25-lb. irons ..
-lb. Boxes ..

Sulphate of Copper.

Casks, for spraying, per lb. 0 04 1/4
100-lb. cases, do. per lb. 0 05

Putty.

Bladder in bbls., per 100 1 75
Bulk 1 65
100-lb. cases (tins) per 100 2 00

Varnishes.

(In bbls.) per gal.
Carriage, No. 1 1 50
Extra do. 2 50
Body Varnish 4 50
Furniture Varnish 0 65
Extra do. 0 90
Denar Varnish 1 60
Hard Oil Finish 1 40
Orange Shellac Varnish 2 00
White Shellac 2 20
Rubbing Varnish 2 50
Polishing Varnish 2 50

Linseed Oil.

Raw, per gal. net 0 42 0 43
Boiled, per gal. net 0 45 0 46
Outside points 2c. more than above figures.

Turpentine.

1 to 4 barrels, net 0 48
Outside points 2c. more.

Castor Oil.

In cases, per lb 0 10
Small lots 0 11

Cod Oil, Etc.

Cod Oil, per gal. 0 50 0 55
Pure Olive 1 20
" Neatsfoot 90

Glue.

(In bbls.)
Common 0 07 1/4 0 08
French Medal 0 10 0 10 1/2
Cabinet, sheet 0 11 0 12
White, extra 0 16 0 18
Gelatine 0 22 0 30
Strip 0 16 0 18
Coopers 0 19 0 20
Al clear 0 09
Liquid Glue—F. LePage's, discount 20 to 25
per cent off list; Munn's, discount 25 to 30
per cent. off list.

HARDWARE.

Ammunition.

Cartridges.
B.B. Caps, Dom., 50 and 5 per cent.
Rim Fire Pistol, dis. 45 p. c. Amer.
Rim Fire Cartridges, Dom., 50 and 5 p. c.
Rim Fire, Military, net list, Amer.
Central Fire Pistol and Rifle, 18 per cent
Amer.
Central Fire Cartridges, pistol sizes, Dom.
30 per cent.
Central Fire Cartridges, Sporting and Military,
Dom., 15 and 5 per cent.
Central Fire, Military and Sporting, Amer.
net list. B.B. Caps, discount 45 per cent.,
Amer.
Loaded and empty Shells, "Trap and
" Dominion" grades, 25 per cent. Rival
and Nitro, 17 p. c.
Shot.
Canadian, common, 12 1/2 per cent.
Brass Shot Shells, 55 and 10 per cent
Primers, Dom., 30 per cent.

Wads.—Baldwin

Best thick white felt wadding, in 1/2-lb bags.....	1 00	
Best thick brown or grey felt wads, in 1/2 lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	

Anvils.

Per lb.....	0 10	0 12 1/2
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils.....lb.	0 09	0 09 1/2
Wilkinson & Co.'s Vices.....lb.	0 09 1/2	0 10

Augers.

Gilmour's, discount 65 p.c. off revised list.		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	4 50	8 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.		

Awls.

Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 30	30
Saddler's, per gross.....	0 45	1 60

Awl Hafts.

Patent Peg, oss.....	7 25	8 00
" Sewing, per gross.....		

Awl and Tool Sets.

Millar's Falls, per doz.....	2 80	3 30
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AXES.

Splitting Axes.....	5 25	5 50
Chopping Axes.....		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50

Axle Grease.

Per gross.....	6 00	13 00
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Bath Tubs.

Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list		
Steel clad, 20 per cent. discount off revised list.		

Boxing extra

Bells.

Brass, 60 per cent.		
Nickel, 55 per cent.		

Door.

Gon Sargent's.....	5 50	8
" Peterboro', discount 50 per cent.		

Cow.

American make, discount 66 2/3 per cent.		
Canadian, discount 45 and 50 per cent.		

Farm.

American, each.....	1 25	3 00
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House.

American, per.....	0 35	0 40
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Bellows.

Hand, per doz.....	3 35	4 75
Moulders', per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.		

Belting.

Extra, 40 and 10 per cent.		
No. 1, leather, discount 60 per cent.		
Standard, 55 per cent.		
Agricultural, 65 and 5 p.c.		

Bench Stops.

Per doz.....	5 00	6 00
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Bits.

Auger.

Gilmour's, discount 85 and 5 per cent.		
Excelsior, discount 60 per cent.		
Rockford Common, 70 to 70 and 10 per cent.		
" Perfection, 50 and 10 per cent.		
Jennings' Gen., net list to 5 p.c. discount.		

Car.

Gilmour's, 47 1/2 to 50 per cent.		
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Expansive.

Clark's, per cent.		
Excelsior, 10 per cent.		

Gimlet.

Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.

Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 00	0 00

Blind and Bed Staples.

sizes, per lb.....	0 7 3/4	0 12
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Bolts.

Carriage, dis., 60 and 10 to 70 p.c. off new list.		
Tire, dis., 70 and 5 per cent.		
Stove, dis., 70 per cent.		
Elevator, dis., 45 to 40 per cent		
Machine, dis., 70 p.c.		
Coach Screws, dis. 80 p.c.		

Boring Machines.

Complete, with augers, each.....	5 00	7 50
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Braces.

Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Millar's Falls.....	15 50	29 00

Brackets.

Shelf.

Japanned Canadian, per doz.		
pairs.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20

Broilers.

Light, dis. 65 to 67 1/2 per cent.		
Reversible, dis., 65 to 67 1/2 per cent.		
Vegetable, per doz., dis. 37 1/2 per cent.		
Henis, No. 8, ".....	6 00	
Henis, No. 9, ".....	7 00	
Queen City.....	7 50	10 00

Butchers' Cleavers.

From 8 to ch, per doz.....	4 23	
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Butts.

Brass.

Wrought Brass, dis., 17 1/2 p.c. revised list.		
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Cast Iron.

Loose Pin, dis. 70 per cent.		
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Wrought Steel.

Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.		
Gen. Bronzed, per pair.....	0 40	0 65

Can Openers.

Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50

Card.

Horse, per do.....	0 60	1 00
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Carpet Stretchers.

American, per doz.....	1 00	50
Bullards, per doz.....	6 50	

Carpet Sweepers.

Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star.....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00

Cartridges.

(See Ammunition.)

Castors.

Bed new list, dis. 55 to 57 1/2 per cent.		
Plate, dis. 52 1/2 to 57 1/2 per cent.		

Cattle Leaders.

Nos. 31 and 32, per gross.....	8 50	9 50
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Cement.

Canadian, Portland.....	2 50	
English.....	2 50	
Belgium.....	2 35	
Canadian hydraulic.....	1 10	
Figures are for barrel lots.		

Chalk.

Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18

Chisels.

Socket, Framing and Firmer.		
American, dis. 75 to 77 1/2 per cent.		
Canadian, dis. 50 and 10 per cent.		
Tanged firmer, per doz.....	0 85	4 00

Churns.

Daisy or Leader, dis. from stock or factory 60, 10 and 5 per cent.		
Steel, net.....	3 00	

Clamps.

Judds', dis. 20 per cent.		
stearn's, per doz.....	3 00	10 00

Clips.

Axle dis. 65 per cent.		
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Coffee Mills.

Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
No. 2.....	70	

Compasses, Dividers, Etc.

American, dis. 62 1/2 to 65 pe cent		
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Cradles, Grain.

Canadian dis. 25 per cent.		
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Dies.

Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.		

Door Springs.

Torrey's Rod, per doz.....(15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00

Draw Knives.

American, dis. 70 and 10 per cent.		
Canadian, dis. 25, 50 and 10 per cent.		

Drills.

Hand and Breast.

Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.		

DRILL BIT.

Morse, dis. 37 1/2 to 40 per cent.		
Standard, dis. 50 and 5 to 55 per cent.		

ELBOWS.

Stovepipe.

Per doz.....	85	1 70
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Enameline.



No. 4—3 dozen in case.....	\$4 50	
No. 6—3 dozen in case.....	7 50	

FAWCETS.

Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star.....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50

FILES AND RASPS.

Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.		
Black Diamond, 50 and 10 to 60 per cent.		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.		
Nicholson File Co., 50 and 10 to 60 per cent.		
Heller's Horse Rasps, 50 to 50 and 5 per cent.		
Jowitt's, English list, 25 to 27 1/2 per cent.		
American, 60 to 60 and 5 per cent.		
Great Western, 60 and 10 per cent.		

FLUTING MACHINES.

Each.....	0 60	2 00
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FORKS.

Hay, manure, etc., dis., 60 to 60 and 10 p.c. revised list.		
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FREEZERS

Ice Cream.

Gem from \$1.25 to \$7 net.		
White Mountain, dis. 50 p.c.		
Arctic, dis. 50 p.c.		

FRUIT PRESSES.

Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.		
Shepard's Queen City, dis. 15 per cent.		

FRY PANS.

Acme, dis. 65 to 67 1/2 per cent.		
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GAUGES.

Marking, Mortise, Etc.

Stanley's, dis. 50 to 55 per cent.		
Wire Gauges.		
Winn's, Nos. 26 to 33, each.....	1 65	2 40

GLASS.

Window.

Box Price.

	Star.	Double Diamond.
Size United Inches.	Per 50 ft.	Per 100 ft.
Under 25.....	1 45	2 75
26 to 40.....	1 55	3 05
41 to 50.....	3 45	5 00
51 to 60.....	3 75	5 70
61 to 70.....	4 05	6 55
81 to 85.....	4 45	7 10
86 to 90.....	5 00	8 10
91 to 95.....	9 30	
96 to 100.....	12 75	
101 to 105.....	14 25	
106 to 110.....	16 50	

GLUE POTS.

KNIVES.			Bailey's (Stan. R. & L. Co.), 50 to 50 and 5 p.c.			SCALES.			Leather carpet tacks			65
Claus, bread, cake, and paring knives, \$7.00			Miscellaneous, dis. 25 to 37½ per cent.			Gurney Scales, 50 p.c.			Trunk nails, black and tinned			70
doz. sets net, to 10 per cent.			Bailey's Victor, 25 per cent.			B. S. & M. Scales, 50 p.c.			Clout nails			66½
Christie, \$7.00 net.			PLANE IRONS.			Champion 60 per cent			Cigar box nails			45
Hay knives, spear point, L or T handle, 60			English, per doz. 2 00 5			SCRAPERS			Lining nails in papers			10
to 60 and 10 per cent.			PLIERS AND NIPPERS.			Box, per doz. 2 10 4 50			" " in bulk			15
Lightning, per doz. 6 50 8 40			Button's Genuine, per doz. pairs, dis. 37½			Boot, "			" " solid heads, in bulk			60
Heath's, 52½ p.c.			40 p.c.			Button's Imitation, per doz. 5 00 9 00			Saddle nails in papers			10
LADLES.			German, per doz. 0 60 2 60			SCREENS.			" " in bulk			15
Melting, per doz. 1 70 4 50			PLUMBS AND LEVELS.			Window, patent, per doz. 0 00 0 00			Tinned capped trunk nails			15
LEMON SQUEEZERS.			S. R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.			Door, per doz. 0 00			Double pointed tacks, discount 30 p.c.			
Porcelain lined, per doz. 2 20 5 60			POPPERS.			SCREW DRIVERS.			TAPES.			
Galvanized, "			Corn, square, per doz. 1 35 2 00			Sargent's per doz. 0 65 4 00			English, ass skin, per doz. 2 75 5 00			
King, wood, "			PRUNING SHEARS.			Wood, F. H., iron, and steel, dis. 87½ &			English, Patent Leather 5 50 9 75			
" glass, "			Per doz. 4 00 5 50			10 p.c.			Chesterman's, each			0 90 2 85
A glass "			PULLEYS.			Wood, R. H., " dis. 80 and 10 p.c.			" steel, each 0 80 8 00			
Fish, per gross			Hothouse, per doz. 0 55 1 00			" F. H., brass, dis. 82½ and 10 p.c.			THERMOMETERS.			
Chalk, "			Axle			" R. H., " dis. 75 and 10 p.c.			Tin case and dairy, dis. 75 to 75 and 10 p.c.			
LOCKS.			Screw			Drive Screws, 87½ and 10 per cent.			THIMBLES.			
Canadian, dis. 50 p.c.			Awning			Bench, wood, per doz. 3 25 4 00			Asbestos, filled, per doz., 35 to 40 p.c.			
Russell & Erwin, per doz. 1 75 7 50			PUMPS.			iron, "			TIES.			
Cabinet, "			Rumsey or Canadian cistern, 60 p.c.			SCYTHES.			Cow, per doz. 1 25 2 00			
Eagle, dis. 30 p.c.			Pitcher spout, 70 and 10 p.c.			Discount, 60 and 10 p.c. revised list.			TINNERS' TOOLS.			
Padlock, "			Canadian cistern, 60 p.c.			SCYTHE SNATHS.			P. S. & W., 10 p.c.			
English and Am., per doz. 0 50 6 00			Canadian pitcher spout, \$1.25 to \$3.			SHEARS			Canadian, 35 to 37½ per cent.			
Scandinavian, "			PUNCHES.			B. & W., japanned, dis. 75 p.c.			TINWARE.			
Eagle, dis. 15 to 17½ p.c.			Saddlers, per doz. 1 00 1 85			B. & W., N.P., dis. 65 p.c.			Stamped, dis., Assn. list, 80 and 10 per cent.			
MACHINE SCREWS.			Conductors, "			Seymour's, dis. 60 p.c.			Japanned, prices on application.			
Iron and Brass.			Tinners' solid, per set. 0 00 0 72			Etna, dis. 75 to 75 and 10 p.c.			Pierced, prices on application.			
Flat head, discount 25 p.c.			hollow, per inch. 0 00 1 00			Heinisch, dis. 60 p.c.			CALKS (Steel)			
Round Head, discount 20 p.c.			PUTTY.			Bristol, japanned, 80 p.c.			Toe calks, per M. net			\$3 85
MAGNOLIA METAL, ETC.			Bladder, per lb. 1 75 0 17½			" N.P., dis. 70 p.c.			Heel calks, "			4 10
Magnolia Anti-Friction Metal, per lb. 25			Tins, lbs. 2 50 2 75			Claus, full nickel, 60 p.c.			Discounts, for 10 boxes at oneshipmen			
No Name Metal, "			RAIL.			" japanned handles, 67½ p.c. off.			per cent.			
Mystic Metal, "			Barn door, per foot. 0 02½ 0 02½			Seymour or Heinisch tailor shears, 15 p.c.			TRANSOM LIFTERS.			
F. O. B. New York or Chicago.			Sliding door, "			SHEAVES.			Payson's, per doz. 2 60			
MALLETS.			Lanes, "			Sliding door, per set. 0 77 1 40			TRAPS (Steel.)			
Tinmiths', per doz. 1 25 1 50			RAKES.			SHOVELS AND SPADES.			Game, Newhouse, dis. 40 p.c.			
Carpenters', hickory, per doz. 1 25 3 75			Cast steel and malleable Canadian, list dis			Canadian, dis. 45 and 2½ p.c.			Game, H. & N., P. S. & W., 65 p.c.			
Lignum Vitae, per doz. 3 85 5 00			60 to 60 and 10 p.c. revised list.			SIEVES.			Game, steel, 72½ p.c.			
Caulking, each			Wood, 25 per cent.			Wood rim, black, per doz. 1 05 1 10			Mouse, per doz. 0 35 1 50			
MATTOCKS.			RAZORS.			" tinned, "			Rat, per doz. 1 40 6 50			
Canadian, per doz. 8 50 10 00			Geo. Butler & Co.'s, per doz. 8 00 18 00			Tin rim, per doz. 2 30 2 45			TROWELS.			
American, 60 and 10 p.c. off list.			Bokers, "			" black, "			Disston's, discount 10 per cent.			
MEAT CUTTERS.			Wade & Butcher's, "			SNAPS.			German, per doz. 4 75 6 00			
Enterprise, American, dis. 30 to 32½ p.c.			Arbuz's, "			Harness, German, dis. 35 to 37½ p.c.			Brade's "			5 00 10 50
German, 15 per cent.			Theile & Quack's, "			Acme "			S. & D., discount 35 per cent.			
MINCING KNIVES.			Currier's, per doz. 1 25 3 60			Lock, Andrews'			TRIERS.			
American, per doz. 0 42 2 35			RIVETS AND BURRS.			Tea spoons, per gross			Butter, per doz. 6 25 9 00			
MOLASSES GATES.			4 mos. or 3 per cent. cash 30 days			Dessert, "			TWINES.			
Stebbin's Patent, dis. per cent., 77½ per cent			Carriage, Section, Wagon Box Rivets, etc.,			Table, "			Bag, Russian, per lb.			
NAILES.			(Steel), 65 p.c.			Desert Forks, "			Wrapping, mottled, per pack. 0 50			
Cut Nails (Iron). Basis—50 to 60 dy. \$1.85			Carriage, Section, Wagon Box Rivets, etc.,			Medium "			Wrapping, cotton, per lb. 0 17			
f.o.b., Toronto, Montreal, Hamilton,			(Norway Iron), 60 p.c.			Table "			Mattress, per lb. 0 33			
London.			Black M. Rivets (Steel), 65 p.c.			WROUGHT SPIKES.			Staging, "			0 27
Cut Nails (Steel). Add 10c. to the prices in			Black and Tinned Rivets, 60 and 5 to 65 and 5			Discount, 35 to 40 per cent.			Broom, "			0 30
list for iron nails.			p.c.			SPOKE SHAVES.			VISES.			
Wire Nails, basis, \$2 per keg Toronto. For			Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.			Wood, English			Hand, per doz. 4 00 6 00			
places outside factory points, \$1.90 f.o.b.			in ½-lb. boxes and			ron, American			Bench, parallel, each			2 00 4 50
Montreal. Carload lots, 5c. per keg less			cartoons, 1c. per lb. extra, net.			Tea spoons, per gross			Coach, each,			6 00 7 00
than above figures.			Burrs, iron or steel, 55 and 5 per cent.			Dessert Forks, "			Peter Wright's, per b. 0 12 0 13			
Brads and finishing nails, special sizes, 80			Terms, 4 mos. or 3 per cent. cash 30 days.			Medium "			Pipe, each			5 50 9 00
p.c. from new list.			RIVET SETS.			Table "			Saw, per doz. 6 50 13			
NAIL PULLERS.			Canadian dis. 35 to 37½ per cent.			SPoons AND FORKS.			WASHER CUTTERS.			
German and American			ROPE.			Wood, English			Per doz. 4 00			
NAIL SETS.			Sisal. Manilla			ron, American			Washers "Iron," 40 per cent., 4 months			
Square, round, and octagon,			¾ in. and larger, per lb. 6¼ 00 7½			Tea spoons, per gross			per cent.			
per gross			¾ in. 6¼ 00 7½			Dessert, "			Amer., per doz., 8, 10 and 12			
Diamond			Cotton			Table, "			inch. 3 38			
NETTING.			Russia Deep Sea			Desert Forks, "			WIRE.			
Poultry, 67½ to 70 per cent.			Jute			Medium "			Brass Wire, 16 to 25 wire gauge, 12½ p.c.			
OIL.			RULES.			Table "			Copper Wire, 12½ p.c. rev. list discount.			
Canada refined oil (Toronto) ..			Boxwood, dis. 80 and 10 p.c.			SQUARES.			Annealed, annealed and oiled, galvanized			
Carbon safety "			Ivory, dis. 37½ to 40 p.c.			Iron, per doz. 1 65 2 90			small lots, 35 per cent. discount off			
Canada w. w. "			SAD IRONS.			Steel, dis. 70 per cent., revised list.			vied list.			
American w. w. "			Mrs. Potts, per set. 0 62½ 1 00			Try and bevel, dis. 50 to 52½ p.c.			[In lots of 1,000 lbs., 35 per cent. discount			
Pratt's Astial.			N.P., per set. 90			STAPLES.			annealed oiled, and annealed and gal			
OILERS.			SAD HEATERS.			Fence, galvanized			vanized, freight will be prepaid when			
McClary's galvan. iron oil can,			Dome, Shepard's, per doz. 4 75 5 00			Wrought iron, dis. 80 to 82½ p.c.			exceeding minimum rate of 20c. per			
with pump, per doz. 0 00 19 50			SAND AND EMERY PAPER.			American, dis. 25 p.c.			lbs.]			
Zinc and tin, dis. 50, 50 and 10.			Dominion Flint Paper, 50 per cent.			STONE.			Bright, coppered steel and spring, 35 and			
Copper, per doz. 1 25 3 50			B. & A. sand, 40 and 2½ per cent.			Washita, per lb. 0 28 0 60			5 p.c. revised list, f.o.b. Montreal, To-			
Brass, "			Emery, per quire. 0 60 0 90			Hindostan, "			ronto or Hamilton.			
Malleable, dis. 25 per cent.			Per lb. 0 22 50			slips, per lb. 0 09 0 09			Broom Wire, per lb. 0 05½ 0 06			
PAILES.			SASH CORD.			Labrador, "			Clothes Line Wire, 19 gauge,			
Galvanized, per doz. 2 25 3 30			Triumph and Morris, dis. 37½, 40 per cent.			Axe, "			per 1,000 feet			2 75 3 00
PENCILS.			Kempshell's, dis. 40, 62½ per cent.			Turkey			WIRE FENCING.			
Dixon's, per gross			Canadian, dis. 45, 50 per cent.			Arkansas			Galvanized, 2 barb, 2½ and 5			
" Carpenter			SASH WEIGHTS.			Water-of-Ayr			inches apart			Small
Per doz. 6 00 9 00			Sectional, per 100 lbs. 1 40 1 50			Scythe, per gross			Galvanized, 4 barb, 4 and 6			lots.
PICKS.			Solid, "			Grind. per ton			inches apart			2 30
Porcelain head, per gross			SAWS.			TACKS, BRADS, ETC.			Galvanized, plain twist, all ..			2 30
Brass head, "			Crosscut, McMillan & Haynes,			Cheese-box tacks, blue, 80 p.c.			Plain twist			2 30
PIPE CUTTING MACHINERY			per dozen			Trunk tacks, black, 80 p.c.			Terms, 60 days, or 2 per cent. in 30 day			
Forbes Patent Die Stocks.—Curtis & Curtis			0 40 0 70			tinned, 80 p.c.			WIRE CLOTH.			
Mrs., Bridgeport, Conn.			" Empire," McMillan & Haynes,			B. B. B. iron carpet, blued			Ordinary, discount 25 per cent.			
No. 30 Hand Machine, range ¼ to			per ft. 0 00 0 70			B. B. B. iron carpet, bright or blued (in			Painted Screen, per 100 sq. ft. ... 1 35			
2 in. R. & L.			Hand, Disston's, dis. 12½ to 15 p.c.			kegs)			WRENCHES.			
\$ 50 00			S. & D., 40 to 40 and 10 per cent.			B. B. B. iron carpet, tinned (in kegs) ..			Acme, 35 to 37½ per cent.			
No. 38 Hand Machine, range 1½			Crosscut, Disston's, per ft. 0 35 0 55			B. B. B. cut tacks (in bulk), 75 and 10			Agricultural, 70 and 10 to 70, 10 and 5 p.c.			
to 4			S. & D., dis. 35 p.c. on Nos. 2 and 3.			¼ weights			Standard, dis. 60, 60 and 10 per cent			
No. 56 Hand Machine, range 2½			Hack, complete, each. 0 75 2 75			Swedes, cut tacks, genuine, blued and			Coe's Genuine, dis. 30 to 32½ p.c.			
to 6			frame only. 0 00 0 75			tinned, 75 and 10			Diamond, dis. 33½ to 35 per cent.			
PLANES.			SAW SETS.			Swedes, upholsterers			Towers' Engineer, each			2 00 00
Wood, bench, Canadian dis. 55 per cent.,			" Lincoln," McMillan &			Swedes, carpet, blued and tinned ..			S. per doz. 5 80 7 00			
American dis. 55.			Haynes, per doz. 6 00 7 50			" brush			G. & K.'s Pipe, per doz. 6 00			
Wood, fancy Canadian or American, 37½			Whiting			" grip, blued, tinned & japan d			Burrell's Pipe, each			3 40
to 40 per cent.			5 63 7 00			Zinc tacks			Pocket, per doz.			
						Copper tacks						

MONTREAL ROOFING COMPANY

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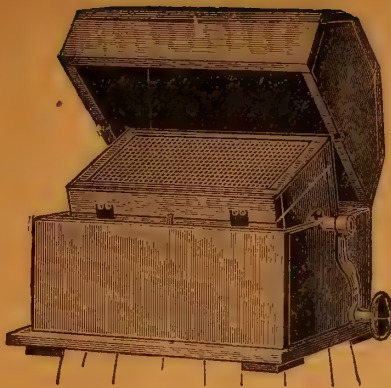
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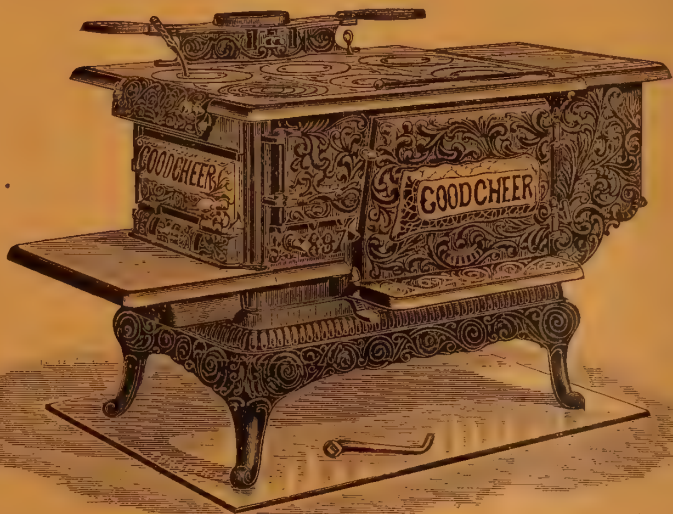
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CANADIAN

HARDWARE

AND METAL
MERCHANT

VOL. IX

MONTREAL AND TORONTO, DECEMBER 25, 1897

No. 52



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We may explain the difference next week, but meanwhile will wish all readers of HARDWARE AND METAL a very Merry Christmas and a Good New Year.

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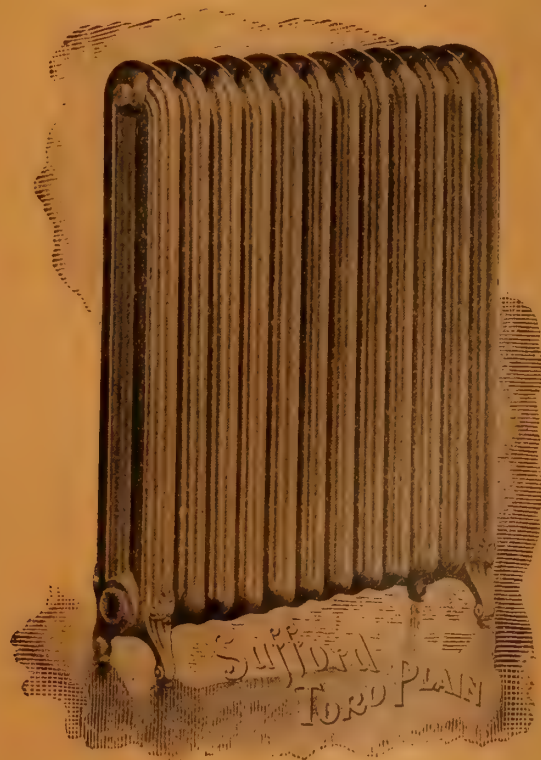
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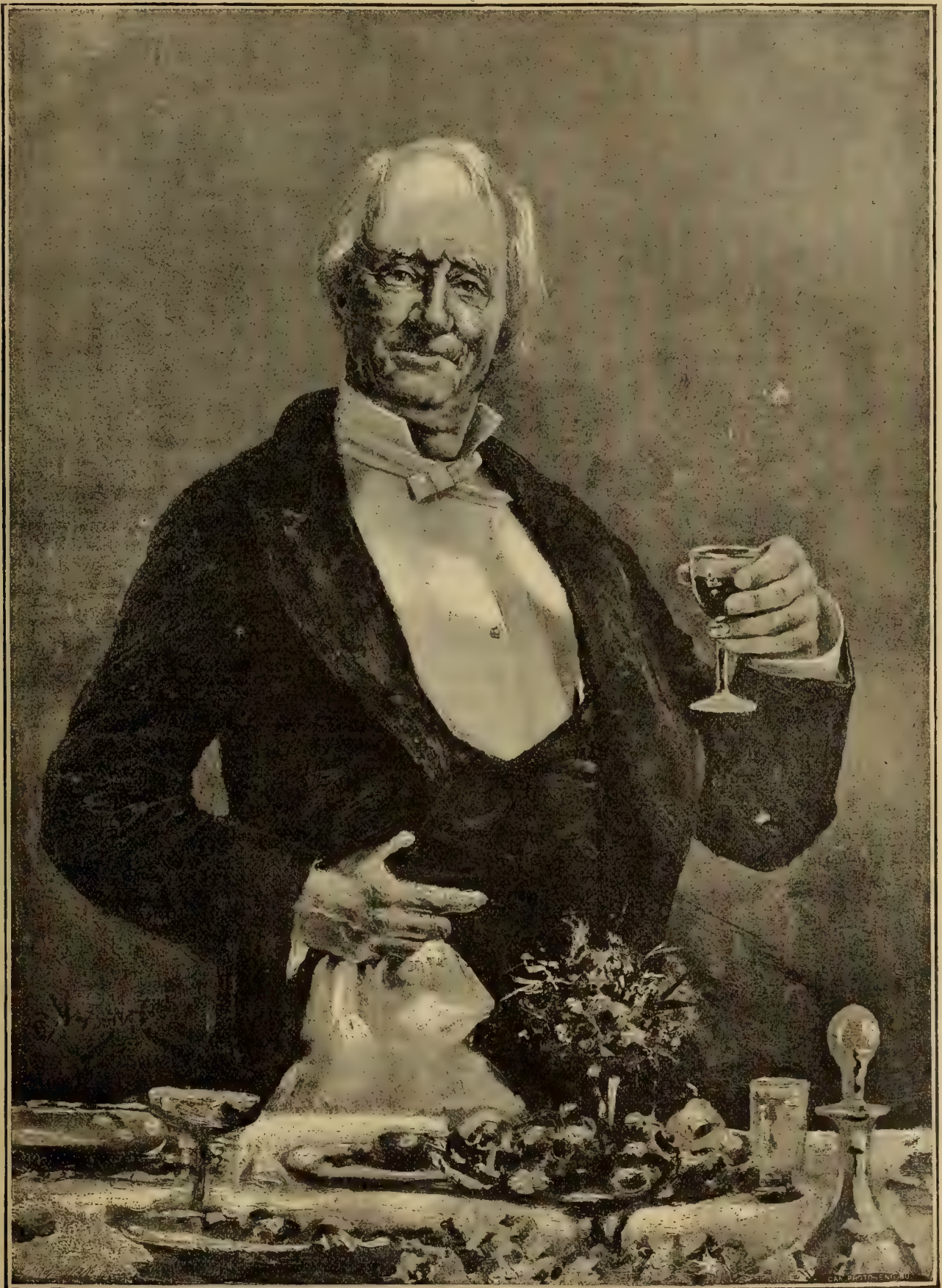
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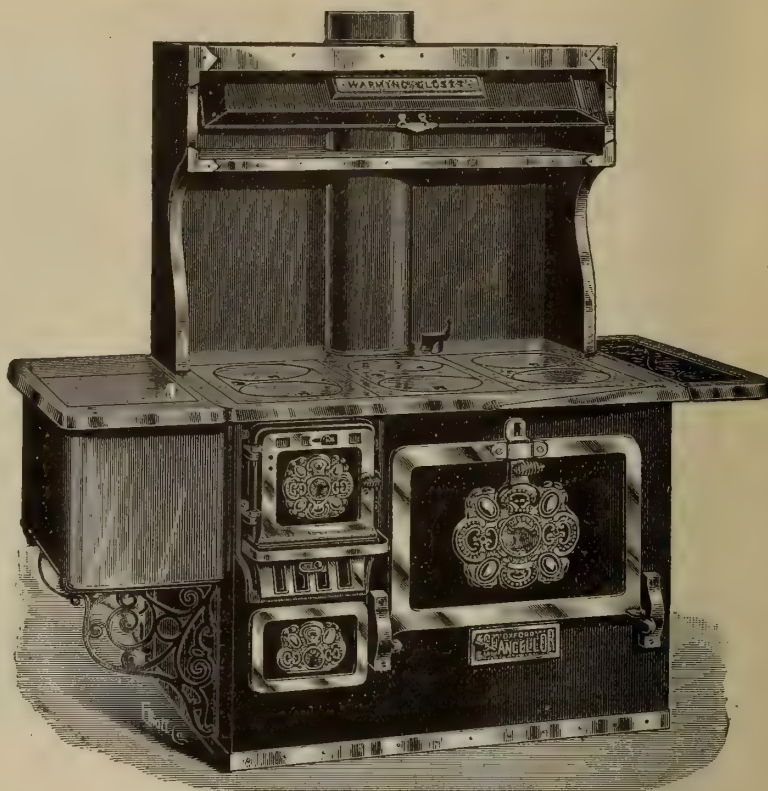
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Published every Saturday.

**WHEN WRITING ADVERTISERS
PLEASE MENTION THAT YOU SAW
THEIR ADVERTISEMENT IN THIS PAPER**

LIGHTS IN HARDWARE WINDOWS.

HARDWARE stores are not, as a rule, kept open as late as those appertaining to other lines of business, but there is no good excuse for the windows of so many of these stores being shrouded in darkness during the winter months from six or seven p.m. till the sun rises the following morning.

It may not be possible to give a hardware window as great a variety of color as that appertaining to groceries or dry goods, but it can nevertheless be made most attractive, and particularly at night, with bright lights thrown upon the various articles which a hardwareman can put into it.

A good many merchants, hardwaremen among others, have electric or gas lights

with reflectors placed in the ceiling of their window. These have an excellent effect, but **HARDWARE AND METAL** has noticed during the past week or two that hardware dealers who have their windows thus equipped have turned out the lights about six o'clock.

To leave the windows in darkness even if the store is closed, particularly during the holiday season, when so many people are parading the streets till late at night, seems to us false economy.

A well lighted and well displayed window is, it should be remembered, an advertisement. And even if the store door is locked there is nothing to hinder people from the next day purchasing an article which the electric, gas or oil light revealed to them on a previous evening.

There are a good many merchants in various lines of business who keep lights in their window till an hour when people usually get off from the streets, and they are the most up-to-date merchants, too. Hardwaremen should fall into line.

CHRISTMAS GREETING.

A Merry Christmas.

Seasonable weather and good trade are factors which largely determine the measure of merriment which a merchant shall enjoy during the Christmas holiday ; but they are not the only factors. Indeed, they ought not to be the chief ones.

It is said that a man gets that measure of happiness out of religion which he puts into it. Whether that be true or not, it is certain a man gets out of the Christmas or any other festive season just as much as he puts

into it. . If he is sordid and selfish he is not only incompatible with the season, but with humanity as well, and his cup is filled with misery and not merriment.

The giving of Christmas presents to every Tom, Dick and Harry who enters the store is to be deprecated. It is not only a losing game, but it is an abuse of a principle which is in itself good. We have the authority of Holy Writ that "it is more blessed to give than to receive ;" but doling out presents as storekeepers have been in the habit of doing in the past is born of the spirit of competition or custom and not of the spirit of good will. Jones gives because Smith does.

While, however, an indiscriminate giving of presents is to be deprecated, no one can object to the storekeeper giving presents when by so doing he is alleviating somebody's necessities and opening up an avenue whereby a ray of sunshine may creep into the home which might otherwise be cheerless on the one day in the year above all others when joy and gladness should be paramount.

Merchants should make their stores as bright and attractive as possible during the Christmas holiday season ; but, by helping to brighten homes which through poverty are dark and dreary, their own holiday will be brighter, "for, it is more blessed to give than to receive."

And again we say to our readers, A Merry Christmas.

If the holiday trade has not a good influence on the hardware business the fault is not with the holiday trade, but with the hardwareman.

GOOD HOLIDAY TRADE.

THE winding-up of the holiday hardware trade has been a satisfactory one to the wholesaler, perhaps more so than it has been for years. It is the most satisfactory for two or three years at any rate.

The demand has been good right along, and in some lines it so much exceeded anticipations that it was found necessary to bring on goods by express in order to supply customers, and in some instances higher prices have been obtained in consequence. This has been particularly true of hockey skates.

Skates of certain sizes which early in the season sold at \$1.35 to \$1.40 have, within the last few days, been bringing \$1.75 per pair.

The demand for cutlery has, on the whole, been exceptionally good, and stocks in Toronto are pretty well depleted. This is especially so in regard to carvers, steels, butcher knives, celluloid table and dessert knives. The shelves in the wholesale houses clearly show the drain which has been made upon them.

In the demand for seasonable goods sleigh bells have not been forgotten, the sale of these having been particularly good.

The wholesalers are now doing a little preparatory work for stock-taking, and in a few weeks they will have learned what the result of the year's business was.

CANADIAN ORDERS FOR BARB WIRE

The various wire manufacturing concerns in the United States have been pushing business in Canada vigorously lately. This is particularly true in regard to barb wire, orders for large quantities of which have been booked. As far as can be learned, however, all deliveries must be made at the end of the present month.

Owing to the proposed consolidation of the various concerns in the United States, quotations for spring delivery, as already announced in *HARDWARE AND METAL*, have been withdrawn, so that those merchants who have already placed orders are likely to save money thereby.

Nothing further has developed in the consolidation scheme. The details for its consummation are, however, being worked out, and experts are engaged in valuing the various plants included in the scheme.

It is the general opinion that the consolidation will take place, and we notice from our exchanges that merchants in the United States are preparing themselves for the prospect by making free purchases of barb wire. The manufacturers, however, are restricting themselves to accepting orders for immediate shipment only.

The position of all articles into the manufacture of which wire enters is strong.

The commercial value of politeness, like the quality of goodness, cannot be computed.

A GOOD TIME TO PAY UP.

UNLIQUIDATED liabilities are not always the result of inability to liquidate the same. It is quite often the cause of inattention or procrastination.

At the end of each year people are in the habit of laying aside, or at least assaying to do so, all weights that retarded their progress during the preceding months. In other words, they inwardly or outwardly make promises which will tend to better their condition morally or financially, and perhaps both.

With the end of the year but a week away, every merchant should, as far as in him lies, endeavor to wipe out his liabilities.

The holiday season is usually a time when a great deal of money is in circulation, and consequently this alone makes it opportune for the payment of accounts. Then, the fact that times are so much better than they have been for years should greatly assist in the premises.

But better as the trade conditions are compared with the last three or four years, the year that is near at hand is almost certain to be much better. This should give confidence; and the desire to start the New Year unencumbered should be the concomitant of this confidence.

It would be well to try to wipe out accounts that may be even scarcely due, particularly if a little extra discount can be secured. And we know of some firms which would be only too glad to increase the discount under such conditions.

Besides the benefit which both creditor and debtor would receive from a general settling up between this and the end of the year, there would be the further effect of stimulating the confidence in the future which already to a marked extent exists.

U.S. VERSUS BRITISH BRASS GOODS.

THE question of United States versus British brass goods was the subject of a conversation between two Montreal commission men the other day which *HARDWARE AND METAL* overheard.

The substance of it was that the United States makers were far more obliging to their customers than the John Bulls. "I can easily understand," said one, "why American brass goods get the preference, for I had a practical illustration myself a short time ago. I sold some British goods this fall, but when they arrived it was found that they had been damaged in transit. When I wrote to the makers on the other side they replied that while they personally were willing to make an allowance, the rules of the Brassworkers' Union, or whatever the body in question is called, to which they had subscribed, prevented them, under a monetary penalty, from making any allowance off the face value of the invoice, no matter what the circumstances were.

"As a result I had to make it good myself, and you can understand that with this experience in mind I will not be in a hurry to push British goods again.

"It is only another example of the absurd lengths to which trade unionism has been carried in England, and it is difficult to understand how employers will submit to such despotic dictation from their work-people as the case in point.

"British makers have enough natural disadvantages to labor under without being put under such rigid regulations as the above mentioned. For instance, the American makers supply the skeleton wooden package free. British makers do not, possibly because they cannot afford to, and the difference amounts to possibly £1 on every two bedsteads in favor of the United States article. Then, again, a buyer can order what he wants, say, today from American makers, and the next day, or at the latest two days, if the goods are urgently required, they can be delivered to almost any part of Canada. This question of geographical position is one of the greatest advantages makers in the United States possess, and, coupled with lower railway freight rates and no necessity for insurance fees on account of an ocean voyage, gives them a pull that the British makers will have to recognize and take steps to surmount if they want to get Canadian business."

WHEAT EXPORTS AND FREIGHT RATES.

IN deciding to send one thousand samples of Canadian wheat to Great Britain for distribution among the millers there the Minister of Agriculture has done a wise thing.

Probably no country in the world produces better wheat than the Dominion of Canada, and yet the quantity we export to Great Britain is lamentably below what we might send, even taking into account the fact that the quantity of wheat we produce is far short of our capabilities.

Great Britain's imports of wheat last year from all countries aggregated 130,718,709 bushels, valued at \$105,503,026, and this was about 22,000,000 bushels less in quantity and about \$4,000,000 less in value than the preceding year.

All that Canada last year contributed to Great Britain's wheat supply was valued at \$7,891,874 worth, or less than 7 per cent. of the total imported by the latter country.

One reason why Canada has not been a larger exporter of wheat to the British market has undoubtedly been high freight rates. Lower freight rates and increased exports of grain to Great Britain are practically one and the same question. The creation of the one will produce the other.

Canada's inland system of waterways only needs a few touches to be made the finest in the world. Perhaps it would be more correct to say they already are the finest in the world, taking distance, etc., into account, but require a few improvements to give them that utility which they should have. We have reference to the securing of a greater and more uniform depth in the St. Lawrence canal system.

A vessel drawing nine feet of water can, if need be, leave the north shore of Lake Superior and sail, by way of lake, canal and river, to Father Point at the mouth of the St. Lawrence River, a distance of over sixteen hundred miles. Except for four or five impediments a vessel drawing fourteen feet could make the same trip, and what is wanted is the removal of these impediments, or rather the facilitating of their removal, for the work is already being prosecuted.

With a uniform depth of fourteen feet the canals would naturally not only admit of larger vessels entering the canals, but, what is more important, would largely obviate the

transhipment of the grain from the vessels to barges, which costs about half a cent per bushel.

Another thing in order to the attainment of lower freight rates, and with it the possession of greater facilities for competing with Russia, India and Argentine for the British wheat market, is a railway commission.

Canada has in many respects an admirable railway system, but as far as railway control is concerned she is woefully behind the age. As it is, the railways run everything to suit themselves, and, what is more to be deplored, they have so far been able to influence members of Parliament so as to prevent legislation which would give the whip handle to the people and not to the railways, as is now the case.

Pending lower freight rates, our duty is to make the best of the facilities we now have, and they are by no means insignificant, and vigorously push our trade with Great Britain, not only in wheat, but in every other commodity or article which it is possible for us to sell her.

The faster a man runs to get rich the sooner will Death overtake him.

BANKRUPTCY LEGISLATION.

FOR twenty years, or two years longer than Canada, the United States has been without a national bankruptcy law. It is not, however, because efforts have not been made to secure one. Time and again efforts have been made. And another is now being made, a bill having been introduced in the House of Representatives at Washington last week.

It is only our purpose to touch upon a few of the most prominent features of the bill.

Provision is made for involuntary as well as voluntary assignments. A person who owes one thousand dollars is made subject to the provisions of the Act after he has had an impartial trial. A national bank, a farmer or a wage-earner are not subject to the Act.

A bankrupt is defined, among other things, as a person who has concealed himself and not having returned forty-eight hours before the filing of a petition in bankruptcy; one who has transferred his property with a view to defeating his creditors; one who has secreted any of his property; one who has suffered an execution for \$500 or over.

An insolvent may, after the expiration of two months, and within the next four months subsequent to being adjudged a bankrupt, file an application for a discharge, and the judge, after hearing all the parties interested, shall grant the discharge provided no dishonest acts have been proven against him. It is also provided that "the confirmation of a composition shall discharge the bankrupt from his debts other than those agreed to be paid by the terms of the composition and those not affected by the discharge."

A person shall be deemed to have given a preference if, being insolvent or in contemplation of insolvency or bankruptcy, he has procured or suffered a judgment to be entered against himself in favor of any person, or made a transfer of any of his property with intent to defeat the operation of the Act, or to enable any of his creditors to obtain a greater percentage of his debt than any other of such creditors of the same class.

If a bankrupt shall have given a preference within four months before the filing of a petition, or after the filing of the petition and before the adjudication, and the person receiving it or to be benefited thereby, or his agent acting therein, shall have had reasonable cause to believe that it was intended thereby to give a preference, it shall be voidable by the trustee, and he may recover the property or its value from such person.

Proved fraud is properly made punishable by imprisonment without the option of a fine.

The bill strikes one as being fairly liberal on the whole, but as to whether it will become law is another thing. The passage of the measure would no doubt help the movement in Canada for a national insolvency law.

There is no room on this earth for people who "want the earth."

WINDSOR, N.S., BEING REBUILT.

The town of Windsor, N.S., a large part of the business portion of which was burnt out some time ago, is being rapidly rebuilt. Many fine buildings are being erected, and plans are being prepared for structures, the cost of which will total nearly one million dollars.

THE CHRISTMAS LETTER.

By Mrs. F. M. Howard.

SHE was such a little bit of an old lady—it seemed as if the wind would blow her away if it could get one fair sweep at her! She stood in the door of the wood-house, her stray white locks partially covered with her long gingham apron, the end of which she had thrown over her head. There she was beckoning mysteriously to someone around the corner of the wood-shed.

"What is it, grandma?" A boy with a chubby, good-natured face had responded to her call, and stood beside her, his hands in his pockets, his cap and tippet drawn closely, for it was a sharp November morning.

"Ann 'Liza wants you to go over to town, don't she?"

"Yes'm."

"Well, see here, sonny, don't you say anything to anybody, but you put this letter in the post office for grandma, and I'll give you something sometime."

"All right." The boy smiled inwardly, for he knew how unsubstantial grandma's poor little promise was, since she had nothing in the wide world to give.

A crumpled letter came forth from the old lady's capacious pocket. "Better tuck it right up under your jacket, sonny, or she'll see it," she said anxiously.

"No she won't, gran'ma, for I'm going straight off this minute. Anyhow, I guess you can write a letter if you want to."

"I earned the stamp for it myself, stringing apples for Mis' Simmons when I was over there," quavered the old lady, pitifully. "She gave me the paper and envelope, too. Now run along, sonny. Don't you lose it, and don't tell anybody." The old lady stepped back into the house.

"You must be hankering after the rheumatism, standing out there with nothing on you," remarked Ann Eliza tartly. "Seems to me if I had to grunt around and pester somebody to rub me half the winter, I'd be a little careful."

"I was careless, that's so, Ann 'Liza," answered the old lady, meekly. "Shall I darn those socks of 'Lijah's?"

"No, I'd rather you'd sew on those carpet-rags to-day. I want you to be careful, though, and not get any litter on my clean floor."

The voice of willing workers was as sweet music in the ears of stirring, ambitious Ann Eliza, and her tone was quite mollified as she brought out the big market basket filled with cut rags.

"You'd better finish up that red ball first, and then begin on the hit-or-miss," she said, her harsh voice as nearly pleasant as

could be expected from one so accustomed to saying sharp, unpleasant things, in loud, unpleasant tones. As a girl she had believed in speaking her mind, no matter whom she hit or hurt, and marriage had only matured the disposition, as husband, children, and of late years the unwelcome mother-in-law, had come into her sphere.

The Barkers were living on a farm near a small prairie village. It was a lonely situation, and old Mrs. Barker pined sadly for companionship when the sharp winter months came on. She was then confined to the narrow limits of the house, and the wider range of Ann Eliza's temper.

All day long the patient old fingers were busy over the rags, sewing and winding, until two large balls were added to an already bulging sackful. The time had passed more quickly than usual, for her heart had been full of her secret.

She had nodded pleasantly to herself as she thought of the letter which Johnny had contrived to let her know was safe on its way, and day dreams of its possible results flitted through her mind from time to time as she worked. It was such a simple matter after all that even Ann Eliza need not have objected.

The old lady had sent a tiny advertisement to the "gratis" column of the weekly paper, the one publication which Ann Eliza allowed herself. With what impatience the old mother watched for the next issue!

If she had known more of the work of preparing a newspaper, she would have had strong doubts of her letter reaching the office in time to be published that week; but her faith was greater than her knowledge. The faith was warranted, too, for it was such a pathetic little plea that the editor had strained several points of precedence to give it place.

The paper came at last. Ann Eliza never read advertisements, but it seemed to the anxious old lady that she read everything else on this particular day.

"Everything is Christmas, Christmas, till it makes a body tired," said Ann Eliza, crossly, as she gave the paper a fling toward Mrs. Barker's armchair. "Goodness knows there won't be much Christmas in this house. It's all foolishness, anyhow."

"No, it's not!" muttered Mrs. Barker, under her breath. Ann Eliza and she had already had one tilt of words that morning, and she did not care to rouse up again her oppressor's weapon of words. Silently she seized the paper and turned to the column of "Requests and Answers."

Yes, there it was! The editor had revised her crude wording, and she read it over and over with increasing satisfaction. It ran: "Will someone write a Christmas letter to

a shut-in who does not expect any other Christmas."

"Well, I be shut in," said Mrs. Barker to herself, nodding her head. "What with my rheumatism, and Ann 'Liza's scolding, I feel like a fly in a bottle, come winter. I suppose those shut-ins are mostly down sick in bed. If I was, maybe Ann 'Liza would be kinder to me, but I kind of hope I sha'n't be. My heart flops around so of nights, I think sometimes I'll die sudden."

"I believe your mother is getting silly," remarked Ann Eliza to her husband, later in the day. "She's done nothing but croon over that paper, and nod her head and mutter to herself all this blessed day. I'll give you fair warning right here, I'm not going to be pestered with any half-witted old woman. When it comes to that, she's got to go to some place provided for such folks."

Elijah Barker shrank as if a blow had struck him. He was a mild man, who had been very fond of his mother in a quiet way, in those days before Ann Eliza had brought him under the weight of her disciplinary thumb.

Ann Eliza did not believe in sentiment, and the old lady had never dared to kiss and fondle the children as her heart prompted her to do. As for Elijah, he had not kissed his mother in years, but he looked over at her wistfully and noticed anew with a pang how white her hair was, how thin and worn her weary old face.

He even dared to rebel in his heart against Ann Eliza's announcement. His old mother should never go to one of those public asylums, not if it cost him the farm to maintain her elsewhere. As Christmas day approached, Mrs. Barker watched the incoming mail nervously. There was no cheerful hum of Christmas preparation going on in the dreary farmhouse. Not even an extra dinner was under way, and Ann Eliza sharply reprimanded the children when they told of the good times their mates were expecting.

"Stuff and nonsense, coddling up children to expect a fuss made over Christmas every year!" she said, grimly, when they had gone out to fill chip-baskets instead of playing.

No letter had come when Christmas morning dawned, and Mrs. Barker beckoned Johnny aside.

"You'll go to the post office and see if there ain't a letter for gran'ma, won't you, sonny?" she said, anxiously. "Clip right out the back way, and you'll get back before any one misses you."

Johnny was almost as much excited as the old lady herself when he came running in a half hour later, with a letter—a dainty,

pretty letter, with a gilt monogram on the seal, and directed in a girlish hand.

"Open it quick, gran'ma, and let's see who it's from!" Johnny exclaimed, breathlessly, as her trembling hands fumbled helplessly at the envelope. It had been so long, so very long, since she had received a letter!

"Say, here's my knife! We'll cut it open, gran'ma."

"Bless her! Bless her dear, sweet heart!" exclaimed the old woman, as she studied the letter. "I hope she'll live to be a hundred—no, I don't, either. I hope she'll always be young and happy, as she is now," and she fairly sobbed as she read the last lines, and passed it over to Ann Eliza, whose face was a picture of curiosity.

Johnny, considering himself a partner in the business, had leaned over her shoulder and read faster than she.

"Say, that's a daisy letter, isn't it gran'ma?" But grandma was sobbing in a corner of her apron, and could not reply.

The letter was from a young girl, whose tender heart had been touched by the plea of the little advertisement, and who, dropping her Christmas plans for a day, had written a bright, girlish letter to the lonely shut-in who would have no other Christmas.

She told of her own home, where Santa Claus had always been a welcome guest; of a dear old grandma whom they had loved and cherished so tenderly, but who would spend this Christmas in a brighter home than theirs. It was so full of loving cheer, of sweet, girlish sympathy, that even Ann Eliza's hard eyes grew softer as she read, and she laid the letter back in the old lady's lap without a word.

All day long Mrs. Barker read and re-read her precious letter, until she almost knew it by heart, and a little of its cheer seemed to pervade the whole house.

Ann Eliza refrained from scolding, even when she heard the history of the advertisement; and she actually unsealed a can of peaches, and made warm biscuit for dinner—a remarkable concession, for her, to the spirit of Christmas festivity.

Far away in a distant city, Mary Truman, a serious, sweet look upon her lovely face, and with tears in her blue eyes, sat reading a letter. It was four weeks after she had written to the shut-in. Mary had often wondered if her letter had reached its destination.

The postman had brought her this letter, directed in a cramped, unbusinesslike hand, and as soon as she could command her voice, she read it aloud to her mother:

MISS MARY TRUMAN:

Dear Miss,—I want to thank you for the Christmas letter you wrote my poor old mother. She got it Christmas morning, and it made her so happy—you can't know how

happy, being young and able as you are. Mother hasn't had very much in this life to make her happy—I say it with bitter pain this morning, for she's gone from us now, Miss Mary, where she'll never have to beg for a little love and attention from others.

We found her one morning just after New Year's, and she had your letter tucked under her pillow and one hand lying on it, so you can see what store she set by it.

The doctor says she had heart disease. She laid out to write to you, and had a letter begun, which I send. May it be a blessing to you all your life—this act of kindness you have done a stranger.

Again I thank you, and remain your truly obedient servant,

ELIJAH BARKER.

"O, mamma, I am so glad, so glad I wrote it!" the girl cried, as she wiped her eyes. "I cannot read this other to you; it is too pitiful, too sacred."

She laid down the little crumpled letter which old Mrs. Barker had begun, and Mrs. Truman's tears fell also on the words penned by the feeble, trembling hand, now forever at rest.

"It pays, dear, pays richly, every act of kindness we can do, and especially for the aged and infirm," she said, as she smoothed Mary's hair with her gentle hand. "We may not always receive our reward so promptly as you have in this case, but He knows."

Out in the lonely farmhouse Ann Eliza stood looking out of the window toward the

POUNDING AWAY . . .

Day in and day out, late and early. That's what counts. That's what gets business.

It is just such work as this that has made the extensive trade for

THE SHERWIN-WILLIAMS PAINTS

We're at it all the time, working every day with all our energy to make our paints and our business better. Finding new trade for them. Finding new uses for paint. Educating the public to paint more and paint with good paint—

THE SHERWIN-WILLIAMS PAINT

Don't you think there is an advantage for you in handling such goods pushed in such a way?

THE SHERWIN-WILLIAMS CO.

Paint and Varnish Makers

Walter H. Cottingham

Managing Director
Canadian Department.

CLEVELAND
CHICAGO
NEW YORK
MONTREAL
BOSTON

cemetery over on the hill. The softly falling snow was hiding the harsh outline of a new-made grave there. A look of regret stole over the hard face.

"I wish I'd been kinder to her," she said to herself. "After all, kindness doesn't cost anything, and it does help along."—*The Youth's Companion.*

LOOKING AFTER CHRISTMAS TRADE

There are few lines of business that tempt the ordinary purchaser more than the hardware. In the hardware store are innumerable articles for the convenience and comfort of the home, and about home centres more interest than about any other place. Especially does the home receive attention about Christmas, when father, mother, sister and brother, son and daughter seek by presents to contribute to each other's happiness. On looking through Mr. Humphries' hardware store we could see on every hand articles that would be useful and ornamental for a residence, the stock is so large and the display so beautiful. Mr. Humphries has within the last few months by improvements in the rear of his shop added to the convenience of his business and the space for the display of his goods. His store is in its arrangements most complete and ingenious, and his stock in every respect up to date. — *Parkhill Gazette-Review.*



The American Axe & Tool Company

MANUFACTURERS OF

Axes, Adzes, Hatchets, Mattocks, Picks, etc.

T. C. COLLINS

No. 10 St. John St., Montreal

Agent for Canada.

253 Broadway

NEW YORK

Catalogues and Price List on application.

REGENERATING BURNT STEEL.

STEEL when heated too highly during glowing, hardening, or welding, passes into a condition in which it is usually called burnt steel. Such steel has suffered a remarkable change in its structure, the fracture surface showing according to the intensity of burning a more or less large, coarse grain of white lustre. This grain is called in practice an open grain, because the single crystals are grouped so far apart as to be plainly distinguishable by the naked eye. By examining the fracture surface with a hardened needle it will be found that soft and very hard spots alternate with each other. It is well known that steel when in such a condition is of no practical use. By exposing steel for a longer time to too high a heat with unobstructed access of air, the so-called dry welding heat, a gradual diminution of the carbon contents is caused so that it is finally transformed to wrought iron, thus losing its hardening quality altogether. But if steel has occasion to absorb large quantities of carbon during heating, it changes to cast iron. These changes of steel regarding its carbon contents are of a chemical nature, and can be remedied by suitable treatment, by carbonization or decarbonization.

There are several means for doing this, says the *Werkmeister Zeitung*. The so-called regeneration of burnt steel is most simply accomplished in the following manner: Heat the steel several times to a dark red, and quench after each heating in hot water. The steel finally recovers its former qualities. The first heating and quenching has the strongest effect, which gradually becomes weaker until after the fourth or fifth treatment the steel is affected no longer. From this it is evident that three or four temperings are usually sufficient. By examining the fracture surface of steel thus regenerated it will be found that its grain has become as fine as it was before burning, in fact, its structure is identical with that of similar steel hardened, but which had not suffered any previous

burning. It is, however, always to be understood that the above-mentioned chemical change of the steel in regard to its carbon contents has not taken place simultaneously with its burning. In this case the simple tempering method is of no avail, and the steel has to be subjected to a different treatment according to the circumstances. If the steel has absorbed too much carbon, it should be heated slowly, allowing free access of air; if it has lost too much carbon, it has to be recarbonized before hardening. This is accomplished by putting the tools or other steel articles to be treated into boxes of sheet iron or crucibles and imbedding them either singly or collectively in powdered bone or charcoal. After the boxes or crucibles have been closed tightly, these together with the contents are heated for about one hour, when the articles are taken out and tempered in water. Frequently heating in closed vessels is dispensed with, and simple hardening means applied to the articles. In this case, for instance, ferrocyanide of potash can be sprinkled on the articles after they have been heated to a brown red, and they are then tempered in water.

A number of means for regenerating burnt steel are in use, and either one or the other is recommended by their respective champions; some favor pure water, but others prefer stronger mixtures, of which we give a few recipes:

1. 10 parts of resin.
5 parts of fish oil.
3 parts of mutton fat.

When employing this mixture the steel is heated to a dark red and quenched in the molten liquid, after which it can be tempered in the usual manner.

2. 10 parts of mutton fat.
10 parts of linseed oil.
1 part of lamp black.

This mixture is melted and the heated steel dipped into it for one minute.

The formation of a board of trade in Nanaimo, B.C., is being agitated.

TOO FAR TO WALK.

Mr. John Falconer carries on a general store at Falconer's Falls, Ont. A farmer's wife, living about six miles away from the village, one day recently bought amongst other articles a box of matches. When she got home she found the matches would not light. They were either damp or lacked sulphur. The first time she went into the village she took the matches along.

"What's the matter with the matches, Mrs. Potter?"

"Oh, I don't know. They don't seem to light, that's all I know."

John opened the box and struck one match after another on the usual place, namely, the hind leg of his pants. They lighted all right. "There don't seem to be anything the matter with them that I can see, Mrs. Potter," he said.

"Perhaps not; but do you think, John Falconer, I've got nothing else to do but walk in here to strike a match on the seat of your pants every time I want a light. If you do you are very much mistaken. Give me another box right away."

TOM SWALWELL.

CULM COAL FOR FERRONA.

The steamer *Louisburg*, belonging to the Dominion Coal Co., Cape Breton, arrived at Pictou Landing on Sunday with a cargo of 2,100 tons of culm coal, from the Dominion Co., for the Nova Scotia Steel Co., Limited. On Monday morning work of unloading and shipping the coal to the iron works at Ferrona commenced, and during the day forty cars, equal to 800 tons, were placed at Ferrona. If navigation remains open four more cargoes will arrive this fall, making a total of 10,000 tons from these mines for the works at Ferrona. A few weeks ago 1,600 tons were shipped by rail from the above mines to the same company at Ferrona. The coal is somewhat coarser than Pictou culm, more like our "slack." The coal is being made into coke. It is supposed the Steel Company have purchased at a low figure.—*New Glasgow Chronicle*.

37 West Front Street

TORONTO

WE thank our customers for the
LIBERAL PATRONAGE
extended us during this year, and
wish one and all...

A Prosperous New Year

H. S. HOWLAND, SONS & CO.

**WHOLESALE
HARDWARE
MERCHANTS**

TORONTO

MACHINERY AND MECHANICAL DEPARTMENT.

A MOTOR LAWN MOWER.

THOSE of our readers who look for an early coming of the horseless age, says Scientific American, will see another sign of its approach in the ingenious machine which forms the subject of our illustration. The ordinary horse-propelled lawn mower used in parks and large recreation grounds is open to the objection that the horse in walking leaves impressions in the grass, especially when the ground is wet and tender. In the motor mower there is nothing to interfere with the grass before it passes under the cutters, and the great weight of the machine, which one might think would leave impressions in the ground, is distributed among three large rollers, the area (on the ground) of which is so large that the pressure on a particular point is hardly sufficient to even make an impression on the grass, and consequently, if anything,



A GASOLINE MOTOR LAWN MOWER

acts as a roller, which is a valuable feature, especially in golf or other recreation grounds. The frame, or main body, of the machine is mounted on three rollers; the first two are the main driving rollers, and the third, which is in the rear and covers the stretch of grass left between the two former, works as a steering gear; for this purpose a wire rope is fastened to each end of the caster yoke and is carried round a wheel at the lower end of the steering shaft at the front of the machine. The main frame carries an upper platform, on which are placed the gasoline engine and tank; the front of the platform serves as a seat for the driver. The engine is of four horse-power, and in recent tests, when mower was loaded with eight men, it moved freely on the level, and with three men on the seat it ran up a slope of considerable incline. The main shaft of the engine is geared to a counter shaft by means of a chain and sprocket. On the counter shaft are friction clutches, one of which carries a sprocket, which is geared to a sprocket on the roller shaft. The clutch

is in engagement when the machine is running forward.

The other clutch is provided with gears which reverse the motion. The two driving rollers run loose on the driving shaft, and are connected to it by two ordinary clutches which are automatically disconnected from the driving shaft when turning curves. The clutches work on feathers on the main shaft, and they are shifted by means of levers whose outer ends engage a quadrant projecting from the back caster yoke. When the caster is moved either way out of the straight line, right or left, the quadrant throws out one or other of the clutches and holds it clear until the motor is running again in a straight line. The revolving cutter frame is made separate from the main frame of the machine, to which it is hinged at the front end. It is driven by a sprocket and chain directly from the engine shaft. By means of a lever and connecting rod placed to the right of the operator, the cutter frame may be lifted from the ground and folded back against the front of the main frame of the machine. The movement and speed of the motor mower are entirely controlled by means of the two hand wheels in front of the operator's seat.

A NEW FILE FIRM.

The machinery and buildings of the defunct Beaver File Works, Levis, Que., were sold by auction on the 16th inst., and were secured by Marceau & Jauteau, of that town, who intend continuing the business on a more extensive scale than formerly. This firm, seeing the necessity of being up to date, are replacing the present plant with all the latest improved machinery, and as they are both practical men, they start out with bright prospects. They intend using the old brand as usual, viz., "The Beaver," and will be pleased to forward price lists, with discounts, to all applicants. Their goods can be procured from all the leading jobbers.

THE STARR WORKS BUSY.

Business is rushing at the Starr company's works just now. The men are working night and day to keep up with the orders. The Dartmouth factories, like all other factories, and every other business, have their dull season and their busy season; there are periods of depression and periods when business revives and goes on as briskly as ever. On the whole, as The Echo has before stated, the Dartmouth factories appear to be doing just about as well as they have always done. In the skate business the Starr company have much com-

petition, but they can make, and do make, a skate that has never been excelled, and so long as they continue to do so there will be no difficulty about selling it.—Echo, Halifax.

INCREASED PIG IRON PRODUCTION.

IN its monthly review of the pig iron production The Iron Age says: The expected increase in the production of pig iron has taken place during November, and we entered the current month with the maximum rate of production yet attained in this country. There is some reserve capacity still, in certain districts, but preparations for resumption are being made in only isolated cases, and this accession is likely to be fully balanced by the usual blowing out of plants for repairs. It will take very considerable inducement in the way of better prices to draw out further capacity, and that inducement is not being held out by the recent course of prices, or by the outlook for the next quarter, which is not particularly brilliant, whatever the spring may bring.

The weekly capacity of the furnaces in blast on December 1 compares as follows with that of preceding periods:

	Furnaces in Blast.	Capacity Per Week. Gross tons.
December 1, 1897.....	191	226,024
November 1.....	183	213,159
October 1.....	171	200,128
September 1.....	161	185,306
August 1.....	152	165,478
July 1.....	145	164,064
June 1.....	146	168,380
May 1.....	146	170,528
April 1.....	153	173,279
March 1.....	156	169,086
February 1.....	154	162,959
January 1.....	154	159,720
December 1, 1896.....	147	142,278
November 1.....	133	124,077
October 1.....	130	112,782
September 1.....	145	129,500
August 1.....	173	157,078
July 1.....	191	180,532
June 1.....	194	182,220
May 1.....	196	189,398
April 1.....	200	187,451
March 1.....	207	189,583
February 1.....	215	198,599
January 1.....	241	207,481
December 1, 1895.....	242	216,797
November 1.....	239	217,306

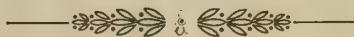
As compared with previous months the record of active charcoal and coke and anthracite furnaces stands as follows in gross tons:

	—Charcoal—		Coke & Anthracite	
	Fur'ces	Capacity	Number	Capacity
	in blast.	per w'k.	in blast.	per w'k.
December 1, 1897...	19	5,061	172	220,962
November 1.....	19	4,656	164	208,503
October 1.....	20	4,636	151	195,492
September 1.....	21	4,555	140	180,951
August 1.....	20	4,003	132	161,375
July 1.....	14	2,804	131	161,170
June 1.....	15	3,321	131	165,059
May 1.....	13	3,729	133	166,799
April 1.....	16	5,368	137	167,011
March 1.....	18	5,425	138	164,561
February 1.....	18	5,144	136	157,813
January 1.....	19	5,456	135	154,264

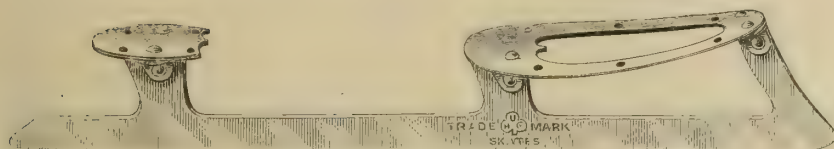
The position of stocks, sold and unsold, as reported to us December 1, was as follows, the same furnaces being represented as in former months:

Stocks—	July 1.	Sept. 1.	Nov. 1.	Dec. 1.
Anthracite and coke...	823,108	705,961	615,407	589,617
Charcoal.....	177,504	158,149	138,130	134,268
Totals.....	1,000,612	864,110	753,537	723,885

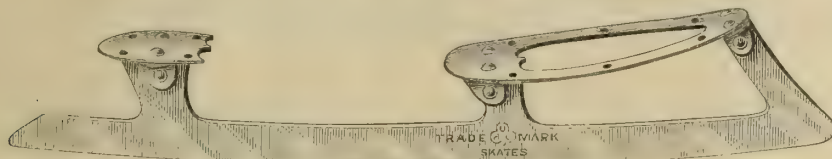
UNION HOCKEY SKATES



These goods will be found to be beautiful in design, finish and workmanship. The points of excellence are: **STRENGTH**, which is guaranteed. **WEIGHT**, which is light. **PROPER LINES** to fit sole of boot. **CORRECT EDGE** of blade, which insures power and speed. **HEIGHT and HANG** for ease of stroke and cutting corners.



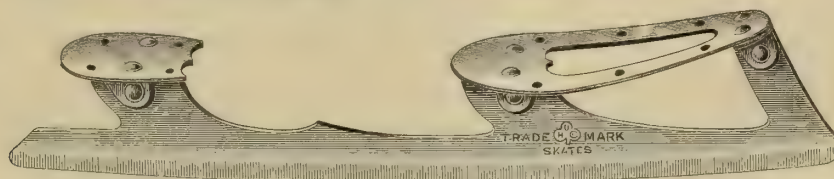
Plain Runner, Straight.



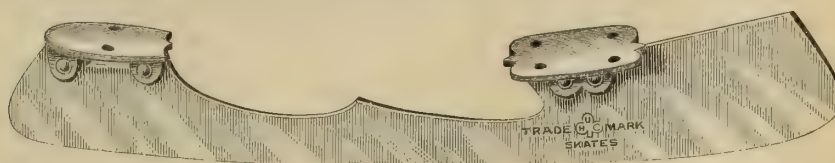
Plain Runner, Curved Blade.



Ribbed Runner.

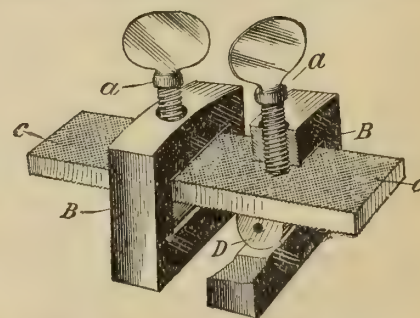


Ribbed Runner, Curved or Rocker Blade, for Ladies.



Victoria Club Skates.

UNION SKATE SHARPENER



UNION CLUB SKATES

THESE
PATTERNS
MADE IN
ALL VARIETIES
OF FINISH AND
QUALITY

THE LARGEST
AND MOST COMPLETE
LINE ON THE MARKET.

Write for circular for full information for importing or we will tell you where they may be obtained in Canada.

UNION HARDWARE CO.

New York Office :

95 Chambers Street

— TORRINGTON, CONN., U.S.A.



Merchants should sell popular goods; goods that their customers know all about; goods that their clerks don't have to spend precious time talking up.

THAT IS WHAT

Enameline

The Modern STOVE POLISH.

is. Hundreds of thousands of Dollars are being expended yearly to educate the public in regard to Enameline. It sells on sight. It puts dollars into the pockets of dealers who handle it.

CANADA PAINT CO.'S ANNUAL DINNER.

THE office staff and salesmen of this company held their annual dinner at the Queen's Hotel, Montreal, on Friday evening, the 17th inst. The proprietor of the hotel, Mr. Vallee, took special pains to have everything served in the very best style and the arrangements were carried out under the personal supervision of the manager, Herr Von Fuchs. The chair was taken by Mr. Robert Munro, the popular manager of the company, while Mr. Hugh W. Aird acceptably filled the post of vice.

About forty sat down, and after the good things of mine host Vallee had been disposed of, the "diversion" commenced. Long speeches were tabooed, the evening being given up to jest, song and story. Pipes were lit and the aroma from choice special reserve havanas floated, incense like, to the ceiling of the noble dining room where the dinner was served.

Mr. Munro, in cordially welcoming the guests, incidentally mentioned that the past year had been a phenomenal one for the Canada Paint Co., being the largest and most successful since its inauguration, and that the future was full of promise and expected to show a large business. The connections were wide and far-reaching. The home and export trade had been brisk and the outlook in the Dominion was brighter than ever. The Canada Paint Co. was prepared to grapple with a large increase during the coming year. Mr. Munro paid the staff a graceful compliment for their business aptitude, push and loyalty to this national company, and sat down amidst great applause, the orchestra playing "For He's a Jolly Good Fellow," the gentlemen joining in with great enthusiasm.

The reading of the various papers and "essays" caused much amusement, and were agreeably sandwiched with songs and "experiences."

Mr. W. T. Andrews, of the British Columbia staff, gave as his contribution "A Trip to Chinatown, or Life in Victoria."

Mr. Gabe Crawford, who resides in St. John, N.B., sang "The Parrot," and, for an encore, read an essay on "The Graphite Strata of New Brunswick."

Mr. E. Barry presided at the piano and also sang two songs most acceptably. His song, "The Two Prodigals," literally "brought down the house."

"The Sarmatian's Trip to the Palm Oil Coast" was then given in Mr. H. W. Aird's inimitable style. He has few equals as a raconteur.

Mr. W. H. Evans sang "The Happy Family," which savored of the antique, and brought up many reminiscences of the dim and misty past.

"Ode to the Shamrock at the Peep O'Day," by Mr. O'Connor, was given so pathetically that an encore was demanded. Mr. O'Connor then read "Poster Ink and its effect on the Nervous System."

Mr. Cobb recited "The Mistletoe Bough," almost moving his audience to tears. As an offset Mr. J. W. Lee gave "Larry Doolan."

Mr. W. H. Newton was excused on account of indisposition. He handed his paper to Mr. Hamilton, the member for Chateauguay Basin, who read the dissertation, "Life on a Raft in the Upper Ottawa" with great éclat.

The next in order was a Highland fling by Mr. Geo. Nimmo, accompanied by John Tamson on the mouth organ.

The chairman now called upon Mr. Robt. Bremner, of London. Mr. Bremner's paper created much discussion and was entitled, "The Deacon—His Place and Power."

"Multum in Parvo" Little warbled "McCarthy Ball," which created roars of delight.

Mr. Robert A. Webster, of the Quebec staff, sang very touchingly "Home Sweet Home," and for an encore took Mr. Napoleon Dansereau's place (who had been

called out to book an order) giving "La Fille de Madame Angot" in the vernacular.

After Mr. T. McGiffen, one of the Winnipeg travelers, had recited a poem, "The Wild and Woolly West," Mr. Ayres created tumultuous excitement by interpreting Chevalier's song, "Knocked 'em in the Old Kent Road." When silence had been obtained Mr. Henry Clucas exhibited his numismatic collection of rare and antique coins, consisting of a Prince Edward Island cent, emblazoned with a codfish rampant, and a penny from the Isle of Man, marked with the three legs of man. Such a display of curious treasure called for a ditty, so Mr. Clucas sang "Ben-My-Chree, or the Manxman's Lament."

Others of the staff made their remarks "upon this occasion," and the jolly party broke up, singing "God Save the Queen."

Following is the menu card:

THE CANADA PAINT, CO., LIMITED.

ANNUAL DINNER, DEC 17th, 1897.

The Queen's Hotel, Montreal.

MENU.

Oysters on half shell (penny levers.)

Consomme Royale (Indian red.)

Filet of salmon, a la cream (pure liquids.)

Petit potatoes au puttee.

Rouge herring de Manx (Klucas style.)

(Elephant) ham, champagne sauce.

Turkey (red) cranberry sauce (No. 136.)

Loin of beef au jus (bull's head.)

Yankee corn de cobb (Natural sauce.)

F. P. green peas. Potatoes, au Paris green.

Olives (Sicilian,) Celery (increased.)

Salade de lobster, Aird-Felch dressing.

Apple Tart(e), a la Minister of Public Works.

Charlotte russe (semi-paste.)

French pastry (antique.) Jelly (coach wine color.)

Creme de la creme de ice (selected flake.)

Crawford peaches — Dansereaux plums — Newton pippins.

Cheese (butyric ether.) Cafe (ivory jet.)

Cheese (Olsen flavor.)

Grape juice, foreign and domestique, ad lib.

Galvanized Sheets

"GORDON CROWN," best English
"FALCON," best American

We are sole agents in Canada for the above brands.

Full stock on hand. Enquiries solicited.

M. & L. Samuel, Benjamin & Co.

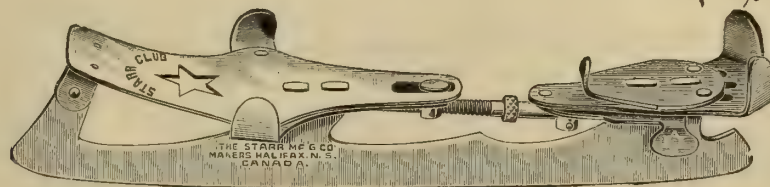
ENGLISH HOUSE.

Samuel, Sons & Benjamin

164 Fenchurch Street, London, E.C.

30 Front St. West TORONTO.

The Starr Club



*Returned
to Montreal Office
Feb. 9/98.
T.A.D.*

The simple and instantaneous adjustment, by means of the knurled connecting screw, makes this one of the most convenient and popular skates in the market. Sole and heel clamps proportioned to suit present style of boots.

Workmanship and Material equal to our Genuine Acme.

The STARR MANUFACTURING CO., Limited

T. L. PATON, Resident Agent
MONTREAL.

Dartmouth, Nova Scotia

ORIGIN OF TABLE FORKS.

It is interesting to trace the origin of the table fork from the earliest times in which it was known, remarks Stove and Hardware Reporter. Many years were required to bring people to the degree of civilization where forks were considered an indispensable portion of the table service. In comparison with spoons, forks are of recent and modern invention. When forks were first used in the eleventh century they were considered an incomprehensible luxury. We regret very much that man has not been as progressive in the mass as he should have been, since the usage of this portion of cutlery is still ignored to a marked degree in many countries, for the reason probably that forks are not as capacious receptacles as spoons or knives in conveying large quantities of food to the mouth.

The first forks were two-tined. This may have aroused the prejudice against them which even to this day it has been found impossible to wholly eradicate. In the middle ages it was considered effeminate for a man to eat with a fork; every one ate with their fingers and washed their hands in a bowl afterward and wiped on the napkins.

When forks were first manufactured in England in the beginning of the seventeenth century, they were subject to much ridicule and it was regarded as an indication of degeneracy that the knife and spoon were not sufficient for use while eating. The first forks were quite straight, later on the tines were slightly bent, soon three-tined forks were made and it was not till the middle of the last century that four-pronged ones came into use.

It was the custom before forks were in vogue in the seventeenth century to hold the food in a napkin in the left hand while with the right it was cut with a knife and carried to the mouth. The manufacture of cutlery has become such a gigantic business now that we can hardly realize a period could have existed when it was in comparative insignificance. Doubtless, one of the inducements which led to the invention of the fork was the liability to cut the mouth with the knife, for it is to be inferred that a knife which cuts food easily would be inserted in the mouth with a certain degree of unpleasant if not painful annoyance, lest a portion of the tongue or lips be severed.

A HALIFAX HARDWARE FIRM.

Some three months or so ago the hardware establishment of A. M. Bell & Co., Halifax, was burned out. The firm started up in new premises, and immediately set about rebuilding, making such improvements as were necessary to make it thoroughly

modern. They have now moved into the new premises. The two entrances have been made into one, with splendid plate glass windows. The sporting goods and the mechanics' tools departments are respectively on the right and left of the entrance, a show case for cutlery is placed in the centre of the store, and behind this is a large range of novelties, etc. The shelving, counters, show cases, etc., are specially convenient, the architect being assisted by employes of the firm, who knew just what was needed. The wholesale department is also fully up to date.

McCLARY'S 1898 RESOLUTION.

The McClary Manufacturing Co., Limited, London, Toronto, Montreal, Winnipeg and Vancouver, have issued the following circular to the trade:

Approaching the threshold of another year we desire to thank our many hundreds of customers for their liberal support and patronage for the past year. We shall start the New Year better equipped than ever to supply promptly the wants of the trade. In addition to our immense factory in London, covering many acres and employing 550 hands, we have purchased a large factory in the city of Montreal, which will, materially increase our product, placing us in a strong position to supply the trade in the province of Quebec and the Maritime Provinces on the most advantageous terms, not claiming to undersell our competitors, but prepared to meet any and all in prices of goods produced by our unrivalled facilities. We had previously established wholesale distributing branches in Toronto, Montreal and Winnipeg, and this year we have built an extensive warehouse in Vancouver for the accommodation of our Pacific Coast trade. Our chief aim will be to supply our customers at lowest prices, guaranteeing prompt shipment. We are getting out new goods from time to time to meet the changing demands of the trade, including a number of lines of stoves and ranges and new articles especially adapted to the Klondyke trade. We would particularly ask you to defer placing orders for goods in our line until you see one of our representatives, who will go on the road promptly on the first of the year.

We solicit the renewal of your patronage, and hope for increased business consequent upon the revival of trade, which is now everywhere apparent.

Wishing you the compliments of the season and a prosperous new year, we are,

Yours truly,
THE McCLARY MANUFACTURING CO.

HE IS NO LONGER A BACHELOR.

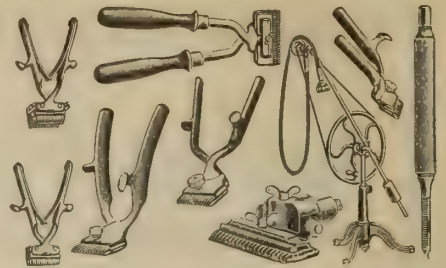
Mr. George H. Smith, one of M. & L. Samuel, Benjamin & Co.'s staff of salesmen, is no longer a bachelor. He joined the noble order of benedicts on Tuesday last, when he was united in marriage to Miss Graham. HARDWARE AND METAL tenders congratulations.

DUSTLESS FLOOR POLISH.

The following recipe appeared in a recent issue of The Pharmaceutical Era:

Neatsfoot oil 1 part
Cottonseed oil 1 part
Petroleum oil 1 part

For the latter use that known as "Golden machine oil." A part of the cottonseed oil may be displaced by lard oil. A coat of the mixture is applied to the floor with a mop and will last for four or five months.



HAIR CUTTERS of every description — **Hand and Power.** You want the best. They are manufactured only by **The COATES CLIPPER MFG CO., Worcester, Mass.** Catalogue on application.

PICTURE CORDS, SHADE CORDS, PICTURE and SHADE HARDWARE, SOLID BRAIDED CORDAGE, BICYCLE DRESS GUARD LACING.

.....Ask your jobber for our goods.

THE OSSAWAN MILLS CO.

Norwich, Conn., U. S. A.

PERSONS addressing advertisers will kindly mention having seen their advertisement in **Canadian Hardware and Metal Merchant.**

PATENTS PROMPTLY SECURED

Send a stamp for our beautiful book "How to get a Patent," "What profitable to invent," and "Prizes on Patents." Advice free. Fees moderate. **MARION & MARION, EXPERTS,** Temple Building, 185 St. James Street, Montreal. The only firm of Graduate Engineers in the Dominion transacting patent business exclusively. Mention this paper.

"BUILD TO-DAY THEN,
STRONG AND SURE.
WITH A FIRM AND
AMPLE BASE."
— Longfellow.

DO YOU?
WISH THUS TO BUILD
an
advertisement
in the
**CONTRACT-
RECORD,**
TORONTO
will bring you
tenders from the
best contractors

WESTERN Incorporated 1851.
ASSURANCE COMPANY

Fire and Marine

Capital, subscribed \$2,000,000.00
Capital - - - 1,000,000.00
Assets, over - - 2,320,000.00
Annual Income - 2,300,000.00

Head Office: TORONTO, ONT.

Hon. Geo. A. Cox, President. J. J. Kenny, Vice-President
C. C. Foster, Secretary.

AMONG THE RETAILERS.*The Christmas Trade.*

The principal item in hardware trade this week is skates.

There seems to be every indication of even a larger business in these goods than last year, which was notably large. The demand for other sporting goods is also picking up. One firm, which is making a special effort to sell sporting goods, reports sales of all such goods ahead of any previous year. Cutlery has had a satisfactory sale, especially with the houses pushing it. The general Christmas trade is satisfactory. The snow which fell this week has helped Toronto trade considerably, enabling farmers to come into the city from a distance.

Pushing an Article.

This week has furnished many illustrations of the value of pushing any articles which one specially desires to sell that I am now thoroughly convinced that a demand can be created for any article of good value. One firm put a number of wringers in the window, advertised them specially, and the first day they were in the window four were sold, and in the following days an average sale of six per day was effected. This same firm has what is considered good value in skates, and got out large cardboard notices of the prices. These have been noticed by people walking on the other side of the

street, and they stopped, looked again, walked over, and were induced to buy. Another firm has an excellent display of brass goods in its window. It reports brass goods selling readily as Christmas presents. I have mentioned before a dealer that is making an energetic push for trade in sporting goods, and thus securing his share and more of what's going in this line. Still another firm finds the chief demand is in cutlery. This particular firm has an attractive cutlery display. On the other hand, some of the retailers told me that Christmas goods were not in their line; they never made any effort to sell Christmas goods. These merchants united in the verdict that trade was rather quiet just now, but that they expected it to pick up at the beginning of the new year. There are, of course, two sides to the question. After a busy fall trade some dealers may prefer a rest about Christmas time. Yet, in the majority of cases, the busy seasons are not so frequent that one can afford to allow them to pass without an endeavor to have some share in the profits procured by pushing.

Still Vs. Moving Window Shows.

The past few days have also given us a good opportunity to study the relative merits of windows which have something living or automatic which by its actions draws attention to the window and the goods in it, and

windows in which are displayed attractively the goods a dealer desires to sell. One store, of which I wrote last week, has had a pair of youngsters dressed as "Yellow Kids," another has had a large doll which automatically dances, another a loom such as was used for making cloth 100 years ago, working in the window. Another, and the most successful of the lot, has had for the last six weeks one or two men showing the correct way to use home exercisers, punching bags, fencing foils, boxing gloves, dumb bells, Indian clubs, etc. Each of these displays have attracted great crowds when in motion, and in the case of one of them the effect has been unmistakably good. On the other hand, many retailers have dressed their windows as attractively as possibly, and by means of price-tags, large advertising cards, etc., have succeeded in drawing a large share of attention toward the goods for sale. As a rule, however, in any case where the article sold is not well known to the community one desires to reach, or where one has an article of special value, the moving display draws the crowd, and makes people talk about the goods, which is the end of an advertisement. But where the article is a staple one, well known, and to be sold at the regular price, a neat catching display of the goods themselves seems to do the best work.

THE RAMBLER.

Henderson & Potts

NOVA SCOTIA PAINT AND VARNISH WORKS

HALIFAX, N.S. and 747 Craig St., MONTREAL

Manufacturers of

The ANCHOR Brands

-- OF --

—WHITE LEAD AND ZINC
—COLORED PAINTS
—READY-MIXED PAINTS
—OIL AND VARNISH STAINS

—VARNISHES AND JAPANS
—DRY COLORS
—MARBLEINE WALL TINTS
—COACH COLORS

Sole Agents for the Dominion for

BRANDRAM BROS. & CO. - LONDON, ENGLAND

MARKETS AND MARKET NOTES

QUÉBEC MARKETS.

MONTREAL, Dec. 24, 1897.

HARDWARE.

BUSINESS in general hardware has been extremely quiet in almost every line this week. All the travelers are off the road and the leading houses have been devoting their attention to stock-taking, so that aside from small scattering daily letter orders there has been nothing doing. This applies to skates, cutlery and all the lines that have recently shown moderate activity, as well as those which have ruled dull since the close of navigation.

BARB WIRE—Business continues quiet and prices are nominally unchanged on the basis of \$2.30.

PLAIN WIRE—There has been little change in this connection, discounts being 30 and 10 off.

WIRE NAILS—There is little or no business to report and prices are steady on the basis of \$1.90 f.o.b. Montreal.

CUT NAILS—Aside from the merest hand-to-mouth orders there is no business to report. The base price remains \$1.85 Montreal, Toronto, Hamilton and London.

HORSE NAILS—There is little to report in these except that makers note some new orders this week. Discounts are 50 per cent.

HORSESHOES—A moderate movement is still reported in horseshoes. We quote: Iron shoes, light and medium pattern, \$3.25; snow shoes, \$3.50; steel shoes, Nos. 0, 1 and 2, \$5; Nos. 3, 4 and 5, \$4.25; assorted, 0 to 5, \$4.75; new light pattern, all sizes, 1 to 5, \$3.50; toe-weight steel shoes, all forward, \$5.50.

SCREWS—There has been little change in these, business continuing quiet. Discounts are: Flat head, bright, 87½ and 10; round head do., 80 and 10; flat head, brass, 82½ and 10; round head, brass, 75 and 10. Machine screws, iron and brass, flat head, discount 30 per cent.; round head, 25 per cent.

BRASS AND COPPER WIRE—Without new feature, discounts being 12½ per cent.

BOLTS—Almost motionless this week. Discounts are: Carriage bolts, ¼ to 5-16, 70 per cent.; ¾ and up, 60 and 10; machine bolts, ¼ and 5-16, 70 per cent., and ¾ and up, 65 and 10.

RIVETS, ETC.—The same remarks apply to rivets. Discounts on iron rivets, black and tinned, all sizes, now are 65 per cent. Copper rivets are unchanged at 50, 10

and 5, and washers, 50 to 50 and 10 per cent.

FILES—Continue the same. We quote as follows: 9 and 10 Mill, \$3.70 and \$4.20, and 4 and 4½ Taper, \$1.60 and \$1.80; best United States makes, 60 per cent. off; best Canadian makes, 70 per cent. off.

CORDAGE—Quiet and steady as last reported. We quote: Sisal, 7-16 and upwards, 6¼c.; ¾, 6¾c.; 5-16 and ¼, 7¼c., and 3-16, 7¾c.; manilla, 7-16, 7¼c.; ¾, 7¾c.; 5-16 and ¼, 8¼c., and 3-16, 8¾c.; lath yarn, 6c.

CHURNS—Precisely the same.

CLOTHES WRINGERS—Prices unchanged and trade almost nil.

SPADES AND SHOVELS—Without motion this week.

SKATES—New business is conspicuous by its absence this week, and orders in hand are nearly all disposed of.

SLEIGH BELLS—These also are quiet, with little trade to report.

WARE—Without change.

CUTLERY—Sorting orders have been fewer this week and trade is much quieter.

BUILDING PAPER—There is nothing doing this week. We quote: Plain, 25c., tarred lining, 35c., and roofing paper, \$1.30 to \$1.45.

HINGES—Unchanged. We quote: Screw hook and hinge, 6 to 10 inch, \$3.50 per 100 lbs.; 12 inch up, \$2.50 per 100 lbs.

SHOT—Quiet and steady. We quote:

Dropped shot, 6c.; chilled shot, 6½c., and buckshot, 7c., less 12½ per cent.

CEMENT—Quiet, but firm, at \$2.15 to \$2.25 for English, and \$1.95 to \$2.10 for Belgian.

FIREBRICKS—As last reported, at \$17 to \$21 per 1,000 as to brand.

METALS.

There is nothing special to report in the metal and heavy iron market. Values remain the same.

PIG IRON—The only transaction in pig iron on this market was some sales of Scotch iron at \$18.50 ex yard. Buyers are well supplied as a rule, and not in want of any material. We quote: No. 1 Hamilton, \$16.50; No. 2, \$15.50; Ferrona, \$16; Siemens, \$16; Summerlee and equal brands, \$18 to \$18.50.

BAR IRON—The feeling in bar iron is easy, if anything, and though no change is to note in the jobbing range, it is said that values have been shaded by makers in the case of round lots.

BAND IRON—There is no change in band iron, values being nominally unchanged.

HOOP IRON—Some small lots have been taken at \$2.

SHEET IRON—Without change, business ruling extremely quiet at \$2.25.

SHEET STEEL—Steady and unchanged at \$2.35.

GALVANIZED IRON—Business quiet

To our many Patrons

WE WISH YOU

A Merry Christmas

AND A

HAPPY AND PROSPEROUS 1898.

See our New Year Resolutions in the local columns of this issue.

FOR PROMPT SHIPMENT ORDER FROM McCLARY

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver

OLIVER
BARBED ANNEALFD GALVANIZED **WIRE** NAILS STAPLES FENCING
COMPANY
Pittsburgh, U.S.A.

The only manufacturers in the world who absolutely control the production and reduction of all the raw material used by them. This fact is one of the best guarantees of uniform quality in "Oliver" wire.

A. C. LESLIE & CO.
Canadian Agents ... Montreal

Fire Bricks

Drain Pipes

Contractors' Supplies

F. HYDE & CO.

31 Wellington street, MONTREAL

THE LEADER BARREL CHURN has more improvements than any other Churn on the market. Gives users better satisfaction. Requires less effort to operate and is more active than ordinary churns. Has patent gas vent, malleable handle and special locking attachment.



Ask your dealers for
"THE LEADER"
Sold everywhere

THE DOWSWELL MANUFACTURING CO., Ltd
HAMILTON, ONT.

Canada Iron Furnace Co., Ltd.

Manufacturers of

CHARCOAL PIG IRON
MONTREAL.

BRAND "C.I.F." THREE RIVERS

PLANTS AT
Radnor Forges, Que. Three Rivers.
Lac a lac Tortue. Grand Piles.

GEO. E. DRUMMOND,
Managing Director and Treasurer

and prices steady on the basis of \$4 to \$4.15 for No. 28 Queen's Head.

TINNED IRON—Unchanged at 5½ to 6c. for 6 x 30 No. 24; other sizes the usual extras.

LEAD PIPE—As last reported at 7c. for lead pipe, and 7½c. for composition waste, with a discount of 27½ per cent.

PIG LEAD—Cable advices are easier from abroad, but there is no change in spot prices which we quote \$3.85 to \$4.

INGOT TIN—Business quiet and prices unchanged at 16c.

INGOT COPPER—Trade quiet with values as before at 12c.

SHEET COPPER—Without new feature. We quote: Sheathing copper, 14½ to 16c., according to weight and quantity; braziers', 15½ to 17½c., according to gauge.

CANADA PLATES—There are only a few small lots moving, while prices are unchanged ex store at \$2.10 to \$2.25.

TIN PLATE—Continues quiet and steady. We quote: Coke, I.C., \$2.85 to \$3; charcoal, I. C., Allaway grade, \$3.25; do, I. X., \$3.90 to \$4; P. D. Crown, I.C., 3.80; do. I. X., \$4.80.

TERNE PLATES—Quiet and steady on the basis of \$6.

COIL CHAIN—A few small lots are asked for. There is no change in prices, which remain \$2.85 for ⅝ up.

SHEET ZINC—Trade dull and prices steady at 5 to 5¼c.

SOLDER—There is no change to report, prices ruling at 11 to 11½c.

SPELTER—Sales have been made at \$4.50, but for small lots they run up to \$4.70.

ANTIMONY—Unchanged at 9½c.

IRON PIPE—There has been some enquiry for small lots of material on city account. We quote as follows: Black pipe, ¼-inch, \$2.05; ⅜-inch, \$2.05; ½-inch, \$2.40; ¾-inch, \$2.85; 1-inch, \$4; 1¼-inch, \$5.15; 1½-inch, \$6.65; 2-inch, \$9; and 2½-inch, \$13.60. Galvanized pipe, ½-inch, \$4.25; ¾-inch, \$5.25; 1-inch, \$7.25; 1¼-inch, \$10; 1½-inch, \$14; and 2-inch, \$19 per 100 feet.

SCRAP IRON—There is nothing doing in scrap, and prices are nominal.

GLASS.

Business in window glass continues quiet, and prices are unchanged. We quote: First break, \$1.40; second do, \$1.50 per 50 feet; third break, 41 by 50, \$3.10, and 51 by 60, \$3.30 per 100 feet.

PAINTS AND OILS.

There is very little business passing but figures are gradually slipping upwards. In linseed oil there is a certain shortage in sight as far as the Canadian mills are concerned and some advance in price is near. Turpentine, too, is newly gathering strength

A Merry Christmas
AND
Prosperous New Year
TO ALL OUR FRIENDS

• • •

Next week we will mail our Annual Calendar, which we hope you will give a prominent place in your office. We want it to serve as a reminder when you are in want of anything in Wire that we are headquarters.

The B. Greening Wire Co., Limited
HAMILTON AND MONTREAL

Abbott & Co.
ROLLING MILLS
.. MONTREAL

MERCHANT BAR IRON—

BRAND

Best Refined	Bar Iron	AVB
" "	Rivet Iron	AVB
" "	Horseshoe Iron	
Ex. Best	Bar Iron	AXB
" "	Rivet Iron	AXB
" "	Stay Bolt Iron	AXB
" "	Hammered Iron	AHB
" "	Charcoal Iron	ACB

Tyre, Sleigh Shoe,
Axe and Rivet STEEL.

NOVA SCOTIA STEEL CO.
Limited
NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron
And SIEMENS MARTIN
Open Hearth Steel

SPORTING GOODS

Our stock is now complete in all kinds of FALL AND WINTER Sporting Goods, consisting of ..

Footballs, Boxing Gloves, Striking Bags, Camping Sets, Sleeping Bags, Folding Furniture, Skates, Hockey Sticks, Snowshoes, Moccasins, etc., etc.

Send for Catalogue C.

The Wightman 403 St. Paul St.
Sporting Goods Co. MONTREAL

ESTABLISHED 1860 ♦ INCORPORATED 1895

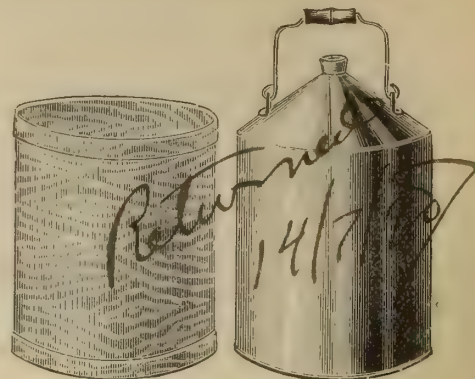


Jacketed Cans

FOR SHIPPING OIL, VARNISH, ETC.

Tin Cans, with Bail Handles, Bung Holes for Cork or Screw Caps; Wood Jacket.

MADE IN ALL SIZES



THE THOS. DAVIDSON MFG. CO. LIMITED - Montreal

in the south and by the time the demand sets in locally, a better price will be asked.

WHITE LEAD—Best brands, Government standard, \$5.37½; No. 1, \$5.00; No. 2, \$4.62½; No. 3, \$4.25.

DRY WHITE LEAD—\$4.50.

RED LEAD—Firm; casks, 4½c.; kegs, 4¾c.; No. 1, casks, 4¾c.; kegs, 4½c.

PUTTY—We quote: Bulk, \$1.50; bladder in bbls., \$1.75; tins in cases, \$1.90 to \$2.00.

LINSEED OIL—Raw, 43c.; boiled, 46c.; five barrel lots one cent less. Delivered anywhere in Ontario between Montreal and Oshawa at 1c. per gallon advance and freight allowed.

TURPENTINE—Firm; 1 to 4 bbls., 50c.

CASTOR OIL—10 to 10½c. in cases, and 9¾ to 10¼c. in barrels.

SEAL OIL—30c. for brown, and 37½c. to 38c. for straw.

GASPE COD OIL—28c.

NAVAL STORES—There is no change. We quote as follows: Resins, \$2.25 to \$5, as to brand; coal tar, \$3 to \$3.50; cotton waste, 4½ to 5½c. for colored, and 7 to 8c. for white; oakum, 5 to 7c., and cotton oakum, 9 to 11c.

PETROLEUM.

There is a steady trade in petroleum. We quote: Canadian, 14c. in car lots and 15c. in small quantities, and American 16½c. in car lots and 17½c. in small lots.

COAL.

There is a quiet demand for coal, prices ruling steady. We quote: Stove and chestnut, \$5.75; egg, \$5.50; Scotch grate, \$6, delivered ex yard; Scotch steam, \$3.50 to \$3.60 ex ship.

HIDES.

Continue quiet with little business to report. We quote: Beef hides, 6½ to 8½c., as to grade, and lambskins 75 to 80c. each.

ONTARIO MARKETS.

TORONTO, Dec. 24, 1897.

HARDWARE.

NEARLY all the travelers are off the road and orders are now largely of a small sorting-up nature. Business in consequence is materially less than it was a week ago; at the same time the numerous

small letter orders which are coming in are keeping the shipping rooms busily employed.

Everyone appears to be wanting sorting-up parcels of skates. Cutlery of all descriptions and plated ware are in good demand. Other lots being purchased are chiefly with a view to making up weights for shipment. It is naturally expected that the hardware trade will be quiet for the next few weeks. Quite a number of customers have been in the warehouses during the past week. Express orders have been quite numerous.

BARB WIRE—A number of orders for United States wire have been booked f.o.b. factory. Shipments from stock are nil. \$1.82 f.o.b. point of shipment is about the idea as to price for future delivery. Terms are 30 days or 2 per cent. 10 days.

ORDINARY FENCE WIRE, ETC.—Some orders in this line have also been booked for future delivery. A fair movement is reported in hay-baling wire of 14 and 15 gauge.

PLAIN WIRE, ETC.—Not much doing. Discount, 30 to 35 per cent., according to quality.

WIRE NAILS—There have been quite a number of orders booked lately both for prompt shipment and forward delivery on short date. Business at the same time has fallen off a good deal during the last week or so. Base price \$2 for delivery in Toronto and Hamilton and \$2.05 in London. At points outside these named the price is \$1.90, freight equalized in Montreal. Carloads 5c. per keg less than above figures. Terms, 4 months, or 3 per cent. off for cash in 30 days.

CUT NAILS—The slight increase in trade noted last week has continued. We quote: Base price, \$1.85 Toronto, Montreal, London and Hamilton. Freight equalized from these points.

HORSE NAILS—Trade remains steady at unchanged prices, discount 50 per cent.

HORSESHOES—Trade continues brisk, and if anything the demand is more active than it was a week ago. We quote f.o.b.,

Montreal and St. John, N.B., as follows: Iron shoes, light and medium pattern, \$3.25 per keg; snow shoes, \$3.50; steel shoes, new light pattern, all sizes, 1 to 5, \$3.50; extra light, Nos. 1 and 2, \$5; Nos. 3, 4, and 5, \$4.25; assorted, 0 to 5, \$4.75.

SCREWS—Trade continues fairly good for this time of the year. Discounts are as follows: Flat head bright, 87½ and 10; round head bright, 80 and 10; flat head brass, 82½ and 10; and round head brass, 75 and 10 per cent. Machine screws, iron and brass, flat head, discount 25 per cent.; round head, 20 per cent.; drive head screws, 87½ and 10 per cent.

BRASS AND COPPER WIRE—Still featureless. Discount, 12½ per cent.

BOLTS—While orders are not very large, they are quite numerous. Discounts are as follows: Common carriage bolts, 3-16, ¼, and 5-16, 70 per cent.; do., ¾ upward, 60 and 10 per cent. full square bolts, 70 and 10 per cent.; Norway carriage bolts, 70 and 10 per cent.; tire bolts, 70 and 5 per cent.; machine bolts, 60 and 10 per cent.; coach screws, 80 per cent.; blank bolts, 60 per cent.; sleigh shoe bolts, 80 per cent.; plough bolts, 50 and 10 per cent.; stove bolts, 70 and 5 per cent.; tire bolts, 70 per cent. Nuts, square, 4¾c., off the list; hexagon, 5¼c., off the list.

RIVETS AND BURRS—There is nothing new to note, business still being fair. We quote as follows: Carriage, section, wagon box rivets, etc., (steel) 65 per cent. off the list; ditto (Norway iron) 60 per cent.; black M rivets, (steel) 65 per cent.; ditto, (Norway iron) 60 per cent.; iron burrs, 55 and 5 per cent.; copper rivets, 50, 10 and 5 per cent.; bifurcated, with box, \$1.25.

ROPE—Trade is inclined to be on the quiet side, but prices are unchanged. We quote as follows: Sisal, 7-16 in. and larger, 6¼c.; ¾ in., 6¾c.; ¼ and 5-16 in., 7¼c.; 3-16 in., 7¾c. Manilla, 7-16 in. and larger, 7¾c.; ¾ in., 7¾c.; ¼ and 5-16

TO THE TRADE

The Chicago Post Office

The Chicago Post Office Building has for the past few months been in process of demolition, to be succeeded by a larger and finer structure on the same site. It was erected in the years 1872 to 1876, and was thoroughly fire-proof, having granite walls, cast iron columns, iron beams, corrugated sheet iron floor arches with concrete top covered with tiles, metal lath and iron roof frame work covered with slate. From the beginning of the work of demolition, frequent inspections of the metal parts have been made by engineers interested in noting what ravages had been made by rust. A committee was appointed by the Western Society of Engineers to report upon the condition in which the iron was found. This report has not yet been made, but much information has doubtless been secured which will be of great value. Other engineers have pursued independent investigations with results highly reassuring to those having faith in the permanence of iron and steel structures. The metal lath taken from the partitions was found only slightly rusted from actual contact with the moisture of the mortar. It presented no evidence of progressive and continuing rust. The side toward the partition was almost without deterioration. The corrugated sheets taken from the floors were of poor quality and exhibited numerous defects, clearly of mechanical origin, but showed no damage from rust. The upper side, on which concrete had been laid, showed bright metal when the adhering cement was scraped off. The under side, which had been painted, was well preserved. Pieces of the corrugated sheets taken from positions in which concrete had not been filled, leaving hollow spaces, had not sensibly rusted when exposed to such cavities. The beams and columns were all found in excellent condition, with even less indication of rust than would be shown if they had been lying for a short time in a builder's yard.

A notable feature demonstrated was the fact that all iron work exposed to cement had been well preserved, indicating the indestructibility of metal foundations imbedded in cement. The metal lath on partitions covered with lime mortar had been slightly attacked by rust, as above mentioned, but the process of oxidation had only been temporary and not indefinitely continued as might have been presumed. The only places showing deep-seated rust were a few locations in the roof, at which points there had evidently been leakages of long standing, but even in these instances the strength of the metal parts had not been materially affected. The result of the inspection of the iron salvage from this building was particularly gratifying to those who use sheets in interior construction, against which a prejudice has existed because of their presumed liability to rapid destruction by rust owing to their thin body. The makers of metal lath have also been benefited by the demonstration of the very slight ravages of rust. It seems reasonable to presume that, if practically no damage was found after twenty years, the life of the metal parts of a building could be considered practically unlimited. Importance is attached by the engineers from whom this information has been obtained to the fact that the iron used in this building had been well painted before it was covered.

METALLIC ROOFING CO. Limited - TORONTO

Manufacturers of Reliable Sheet Metal Building Materials

in., $8\frac{3}{4}$ c.; 3-16 in., $8\frac{1}{4}$ c.; deep sea line, $13\frac{1}{2}$ c. for water laid, and $14\frac{1}{2}$ c. for machine-made; hemp, 7 to 9c.

CHURNS—A few orders are being booked for forward delivery; shipments from stock are light. Discount, 60, 10 and 5 per cent. Delivery points are Toronto, Hamilton, London and St. Mary's. Terms, 4 months or 3 per cent. off for cash in 30 days.

CLOTHES WRINGERS—Orders are very small. We quote: "New Leader," \$30 per dozen; "Royal Canadian," with brass corners, \$29.50.

SPADES AND SHOVELS—Trade has fallen off considerably as far as quantities are concerned. Discount, 45 and $2\frac{1}{2}$ per cent.

FALL SPECIALTIES—Sleigh bells, axes and saws are going out quite freely. In skates the demand is active, but there is a scarcity of certain lines of hockey skates, and also in some of the ordinary Acme, but in general orders for skates can be completed.

CUTLERY—There has been a very brisk demand during the past week, although it has, of course, been of a sorting-up character. The demand for cutlery this season has been exceptionally good, and wholesalers' stocks have been materially reduced.

SNOW SHOVELS—The snowfall of the

last week has caused an increase in the demand for snow shovels. We quote steel shovels at \$2.85 to \$2.95 per dozen net.

BUILDING PAPER—While there still seems to be a fair demand, the quantities wanted are not nearly as large as they were. We quote: Plain building, 27 to 28c. per roll; tarred lining, 37 to 38c., according to quality; tarred roofing felt, \$1.40 for 10 oz. and \$1.45 for 16 oz. per 100 lbs.; "Cyclone," 40c. for plain and 45c. for tarred.

LEATHER BELTING—Trade is fair. We quote: Standard, 45, 10, and 10 per cent.; extra, 40, 10, and 10 per cent.; agricultural, 70 per cent.

HINGES—Business is moderate. We quote 6 to 12 inch, inclusive, at \$3.15 per 100 lbs., and 14-inch and upwards at \$2.35; light T and strap, 70 and 10 per cent.; screw door hinges, \$10.50 per gross pair.

CEMENT—Trade has fallen off considerably, and is now quiet. We quote in barrel lots: Canadian Portland, \$2.50; English do., \$2.85; Belgian do., \$2.75; Canadian hydraulic cements, \$1.10 to \$1.25; calcined plaster, \$1.90 to \$2 per barrel.

METALS.

The metal trade is still fair for this time of the year, but of course there is not a

great deal doing. Prices remain steady and unchanged.

PIG IRON—Steady and quiet. We quote Hamilton iron at the furnaces: No. 1, \$14; No. 2, \$13.50; No. 3, \$13.

BAR IRON—Trade continues slow. We quote base price at \$1.40 and \$1.45 carload lots, Toronto, and \$1.50 to \$1.55 for less quantities.

HOOP AND BAND IRON—Trade continues fairly active in both these lines. We quote: Band iron, \$1.85 for Canadian and \$2 for imported; hoop iron, \$2.

SHEET STEEL—There has not been the same amount of business done during the past week in No. 1, but No. 2 on the other hand shows increased activity. We quote: 12 gauge, \$2.25 per 100 lbs.; 16 gauge, \$2.40; 18 to 20, \$2.30 to \$2.40; 22 to 24, \$2.30 to \$2.40; 26, \$2.35 to \$2.45; 28, \$2.45 to \$2.55; "Dead Flat," 14 to 16 gauge, \$3.25 per 100 lbs.; 18 to 20, \$3; 22, \$3.10; 24, \$3.50; 26 gauge, \$3.75.

BLACK IRON—The demand has been fairly good and prices are steady. We quote: 10 to 12 gauge, \$2.25 to \$2.40 per 100 lbs.; 14 to 16 gauge, \$2.60 to \$2.70; 18 to 20 gauge, \$2.30 to \$2.40; 22 to 24 gauge, \$2.25 to \$2.35; 26 gauge, \$2.30 to \$2.40; 28 gauge, \$2.45 to \$2.55.

GALVANIZED IRON—While there is a

fairly satisfactory trade being done, there have not been as many large orders going out as was noted last week. We quote as follows: Queen's Head (case lots), 16 gauge, $3\frac{3}{4}$ c.; 18 to 24, $\$3.87\frac{1}{2}$ c.; 26, $4\frac{1}{4}$ c.; W. G. 28 gauge, $\$4.37\frac{1}{2}$ c.; Gordon Crown (case lots), 28 gauge, $4\frac{1}{4}$ c.; 26 gauge, 4c.; 22 to 24 gauge, $3\frac{3}{4}$ c. per lb. American (case lots), 28 gauge, $\$3.80$; 26 gauge, $\$3.55$; 22-24 gauge, $\$3.30$; 18 to 20 gauge, $\$3.05$. Small lots in all the above are $\frac{1}{4}$ c. per lb. higher than figures named.

STEEL BOILER PLATES—Quiet. We quote: $3\frac{3}{4}$ and larger, $\$1.75$ per 100 lbs.

TINNED IRON—There is little or nothing doing outside the booking of orders for import. We quote: Up to 20 gauge, $\$5.25$ per 100 lbs.; 22 to 24 gauge, $\$5.75$; 26 gauge, $\$6.25$; 28 gauge, $\$6.75$; special cut sizes, $\$4.50$; extra large sizes, $6\frac{3}{8}$ to $7\frac{3}{8}$ c. per lb.

LEAD PIPE AND TRAPS—Quiet. We quote: Lead pipe, 7c.; lead waste, $7\frac{1}{2}$ c., discount, $27\frac{1}{2}$ per cent.; traps, discount 25 per cent. on small lots, 25 and 5 on $\$10$ lots, and 25, 10 and 5 per cent. on $\$25$ lots and over.

PIG LEAD, ETC.—Quite a number of large sales are reported, and in general trade is fair. We quote pig lead at 4 to $4\frac{1}{4}$ c., and bar at $4\frac{1}{2}$ c.

SHOT—Quiet. We quote: Dropped shot, 6c.; chilled do., $6\frac{1}{2}$ c.; buckshot, 7c. Discount, $12\frac{1}{2}$ per cent.

INGOT TIN—Trade is good, but it is principally in the way of small orders. We quote 16 to $16\frac{1}{2}$ c. for Lamb and Flag and Straits.

INGOT COPPER—A few good sales are reported, but in general trade is in small quantities. We quote 12 to $12\frac{1}{4}$ c. per lb.

SHEATHING COPPER, ETC.—Trade has been a little better in all lines during the past week, with prices unchanged. We quote: Sheathing copper, $14\frac{1}{2}$ to 16c., according to weight and quantity; braziers', $15\frac{1}{2}$ to $17\frac{1}{2}$ c. per lb. according to gauge.

IRON PIPE—Trade remains steady and prices firm. We quote as follows: Wrought, $\frac{1}{4}$ to $\frac{3}{8}$ inch, $\$2$; $\frac{1}{2}$ inch, $\$2.35$; $\frac{3}{4}$ inch, $\$2.87$; 1 inch, $\$3.87$; $1\frac{1}{4}$ inch, $\$5.10$; $1\frac{1}{2}$ inch, $\$6.38$; 2 inch, $\$9.25$ per 100 feet; galvanized, $\frac{1}{2}$ inch, $\$4$ to $\$4.25$; $\frac{3}{4}$ inch, $\$4.80$ to $\$5$; 1 inch, $\$6.75$ to $\$7$; $1\frac{1}{4}$ inch, $\$9.25$ to $\$9.62\frac{1}{4}$; $1\frac{1}{2}$ inch, $\$11.75$ to $\$12.25$ per 100 feet.

SOIL PIPE—There is not much doing, and discount is unchanged at 60 and 10 per cent.

RANGE BOILERS—There is not much doing, but prices are steady. We quote as follows: Galvanized, 30 gals., $\$5.25$ to $\$5.50$; 35 gal., $\$6.25$; 40 gal., $\$7.50$; copper, 30 gal., $\$22$; 35 gal., $\$26$; 40 gal., $\$30$; discount off copper boilers, 25 per cent.

STANDARD of
AMERICA
for
30 Years



FOR PIPE.

NICHOLSON
FILES

NICHOLSON
FILE CO.
Providence, R.I., U.S.A.
Largest Producers in the World

In Stocks and Dies
there is no better than

HART'S DUPLEX
ADJUSTABLE.

Write for Lists and Discounts
The Hart Mfg. Co.

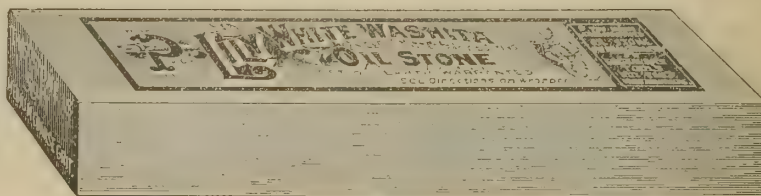
21 Wood St., Cleveland, O., U. S. A



FOR BOLTS.

Pike's Lily White Washita Oil Stone

The Only Perfect
Oil Stone.



Every Stone Guar-
anteed to Satisfy

Acknowledged by experienced mechanics **The Best on Earth.**

THE PIKE MFG. COMPANY, Pike Station, N.H., U.S.A.

IT'S A SURE THING! HE HAS A

Marlin $30/30$ Smokeless

HIS BARREL, made of "SPECIAL SMOKELESS STEEL," well rifled, the old BALLARD system, shoots true and hits hard. His CARTRIDGES, loaded with 33 grains of smokeless powder, give 2,000 feet per second velocity. His BULLETS, soft-nosed and flat-pointed, make a wicked wound. His SIDE-EJECTING ACTION won't hit him in the face when he pumps in the second shot, and no smoke will obstruct his vision across the SOLID TOP.

Why don't you write for the 196-page Sportsman's Guide (just out)? Tells about powders, black and smokeless; the right sizes, quantities, how to load; hundreds of styles of bullets, lead, alloyed, jacketed, soft-nosed, mushroom, etc.; trajectories, velocities, penetrations of all calibres from 22 to 45; how to care for arms, and 1,000 other things. FREE if you will send stamps for postage to

THE MARLIN FIRE ARMS CO.

New Haven, Conn.

CANADA PLATES—Trade is naturally falling off in this line, but 60 and 75 sheet boxes for special purposes are still going out in fair quantities. We quote: Half-polished, 52-sheet boxes, $\$2.35$; ditto, 60-sheet boxes, $\$2.40$; dull, 75-sheet boxes, $\$2.50$; all-bright, "Garth," $\$2.60$ per box; ditto, "Alaska," $\$3$.

TIN PLATES—Trade is about the same as last week and is devoid of special features. We quote: Cokes, $\$3$ to $\$3.10$ for 14 x 20; do. squares, $\$3.15$ to $\$3.25$; $\$6.25$ for 20 x 28; charcoal plates, $\$3.50$ to $\$3.60$ basis for good brands.

TERNE PLATES—Trade is quiet, and we quote: I C, $\$6$ to $\$6.75$; I X, $\$7.50$.

SHEET LEAD—Business is fair, at $5\frac{1}{2}$ c. per lb.

COIL CHAIN—Orders are coming in more freely and enquiries for prices are quite numerous. We quote: $\frac{1}{4}$ in., $4\frac{3}{4}$ c.; $\frac{3}{8}$ in., $\$3.70$; $\frac{1}{2}$ in., $\$3.25$. Large quantities can be shaded.

SHEET ZINC—Stocks are rather low, but documents of fresh lots have arrived, and the shipments are expected daily. We quote: Imported, $5\frac{1}{4}$ c. in ton lots, and $5\frac{1}{2}$ c. in smaller quantities.

SOLDER—The demand keeps good. We quote: Standard, 11c.; strictly half and half, $11\frac{1}{2}$ to 12c.

ANTIMONY—Trade is fair. We quote: Cookson's, $8\frac{3}{4}$ to 9c.; other makes, $8\frac{1}{4}$ to $8\frac{1}{2}$ c.

GLASS.

The demand has now fallen off, and a general quietness prevails. We quote as follows: First break in 50-foot boxes, $\$1.45$, and in 100-foot boxes, $\$2.75$; double diamond, under 25 united inches, $\$4$, Toronto, Hamilton and London; terms, 4 months or 3 per cent. 30 days.

PAINTS AND OILS.

The usual dulness of trade at this season of the year has set in, and the wholesale

**Going to Retire?
Want to Sell Out?**

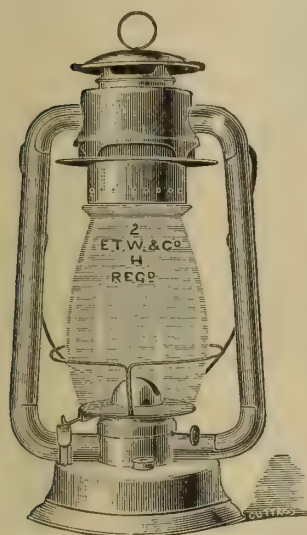
If so, say so in **HARDWARE AND METAL**. It reaches the most likely buyers. Two cents a word each insertion.

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ADVERTISEMENTS**

Are inserted in this paper at the rate of two cents per word each insertion, payable strictly in advance. Advertisers may have their replies addressed in our care free of charge, but must send stamps for re-addressed letters.

Hardware and Metal, Toronto

E. T. WRIGHT & CO.



Manufacturers of

Tubular and Cold Blast
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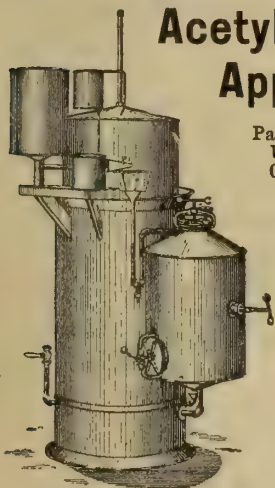
Bird Cages
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Stamped
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..TINWARE

HAMILTON - CANADA.

**The Niagara Falls
Acetylene Gas
Apparatus**



Patented in Canada,
United States and
Great Britain.

This is the only machine perfectly automatic in its action, requiring little or no attention. Machines always in stock from 5 to 100 light. Larger sizes on short notice.

Acetylene Gas the
Coming Light.

Cheaper than Electric Light, Coal Gas or Coal Oil.

For Private Dwellings, Business Houses, Churches
Public Halls and Offices.

For particulars write to the

NIAGARA FALLS ACETYLENE GAS MACHINE CO.
Niagara Falls, Ont. Limited

firms are taking advantage of the quiet to get through their stock-taking. Prices are unchanged. We quote as follows :

WHITE LEAD—Ex Toronto, we quote: Pure white lead, \$5.50 ; No. 1, \$5.12½ ; No. 2, \$4.75 ; No. 3, \$4.37½ ; No. 4, \$4 ; dry white lead in casks, \$4.85.

RED LEAD—We quote: Genuine, in casks of 560 lbs., \$4.75 ; ditto, No. 1, in casks of 560 lbs., \$4.50 ; genuine, in kegs of 100 lbs., \$5 ; ditto, in kegs of 100 lbs., No. 1, \$4.75.

LIQUID PAINTS—Pure, \$1 per gallon ; No. 2 quality, 90c. per gallon.

PARIS WHITE—We quote 90c.

WHITING—55c. per 100 lbs. ; 50c. per 100 lbs. in 5-barrel lots. Gilders' whiting, 60c.

GUM SHELLAC—In cases, 22c.

PLASTER PARIS—Ordinary, \$1.75 per barrel ; New Brunswick, \$2.10 per barrel.

CASTOR OIL—In cases, 10½c. per lb. and 11½c. for single tins.

SEAL OIL—Is quoted at 59 to 60c. per gallon, and yellow seal at 49 to 50c.

LITHARGE AND ORANGE MINERAL—We quote: Litharge, 5½ to 6½c. ; orange mineral, 6½ to 7½c.

PUMICE STONE—Powdered, \$2.60 per cwt. in barrels, and 4c. per lb. in less quantity ; lump, 10c. in small lots, and 8c. in barrels.

PUTTY—In bulk, casks 800 lbs., \$1.70 bladders, in 400-lb. barrels, \$1.75 ; bladders in 100-lb. cases, \$2 ; 25-lb. tins, 4 in case, \$2.20 ; 12½-lb. tins, 8 in case, \$2.45.

LINSEED OIL—Quotations to outside western points are (freight allowed) : Raw, 1 to 4 barrels, 45c. ; boiled, 1 to 4 barrels, 48c. Prices in Toronto, Hamilton, London, are 2c. per gallon less.

TURPENTINE—We quote for outside western points, freight allowed, 1 to 4 barrels, 50c. ; in less quantities than barrels, 5c. per gallon extra will be added and packages charged for. Prices in Toronto, Hamilton, and London are 2c. less than the above. Terms, net 30 days.

OLD MATERIAL.

There is very little business being done. We quote as follows : Agricultural scrap, 40c. per cwt. ; machinery cast, 42½c. per cwt. ; stove cast scrap, 25 to 30c. ; No 1 wrought scrap, 40 to 45c. per 100 lbs. ; No. 2, including sheet iron and hoop iron, 10c. ; new light scrap copper, 7¾c. per lb. ; bottoms, 7½c. ; heavy copper, 8 to 8½c. ; light scrap brass, 4 to 4½c. ; heavy yellow scrap brass, 6c. ; heavy red scrap brass, 6¾c. ; scrap lead, 2½ to 2¾c. ; zinc, 2c. ; scrap rubber, 3½ to 3¾c. ; good country mixed rags, 75 to 85c. ; clean dry bones, 30 to 35c. per 100 lbs.

SEEDS.

There is an unusual range in the quality this fall. For the lower and medium grades

WE MANUFACTURE

Wrought
Steel
Shelf

BRACKETS

— IN —

BLACK, JAPAN, NICKEL and
COPPER FINISH.

All sizes in stock. Send for prices.

H. R. IVES & CO.
MONTREAL

-- 50th --

ANNIVERSARY!

ONEIDA COMMUNITY

1848!

Limited

1898



S. Newhouse

50 YEARS ago Sewall Newhouse, the celebrated hunter and trapper, was making traps for himself and for sale to the Indians, in his little blacksmith shop near Oneida Creek. He made each part by hand, forging the springs from old axe-blades.

50 YEARS ago the Oneida Community bought some Indian lands from the Government, and started their enterprises on the Oneida Reservation. Mr. Newhouse joined the Community, and the Community began to make traps. To-day the **NEWHOUSE TRAP** is the main reliance of trappers, not only in America, but in every country of the world.

Newhouse Traps

are sure to go and sure to hold.

there is little demand, but for the choice grades there is a good demand for export. We quote alsike at from \$2 to \$5; red clover at from \$2.50 to \$4; timothy, \$1 to \$1.40 for machine-threshed, and for bright, flail-threshed \$1.50 to \$1.75.

HIDES, SKINS AND WOOL.

HIDES—Market remains firm. We quote for both cowhides and steerhides: No. 1, 9c.; No. 2, 8c.; No. 3, 7c.

CALFSKINS—We quote as follows: No. 1 veal, 8 lbs. and up, 12c. per lb.; No. 2, 10c.; Dekins, from 30 to 35c.; culls, 15 to 20c.

SHEEPSKINS—Another rise of 5c. has taken place. They are now selling at \$1 to \$1.05.

WOOL—There is a nominal demand for pulled wools, the price quoted being 20½c. for fleeces in sub-wash.

COAL.

The colder weather of the present week has naturally increased retailers' sales, but it has not as yet affected wholesale shippers. Anthracite is quoted at Buffalo and bridges: Grate, \$4.24; egg, \$4.46; stove, \$4.46; chestnut \$4.46, net tons.

PETROLEUM, ETC.

There has been a brisk demand for all lines, with prices unchanged. We quote as follows in 1 to 10 bbl. lots, imperial gallon, Toronto: Canadian, 14c.; carbon safety, 16½c.; American water white, 17½c.; Pratt's astral, 17c. in bulk.

MARKET NOTES.

Micks and Cox, hardware merchants, Peterboro, are dissolving.

UNITED STATES MARKETS.

NEW YORK, Dec. 23, 1897.

PIG TIN—The market remains in a rather flat condition. Small purchases by consumers and interior dealers constitute about the only business here, while London sent very tame reports, with prices a shade lower. Here no business or offering at less than 13.65c. net was reported, while 13.70c. free on board was quite generally quoted for lots of five tons or more, prompt and near future delivery.

COPPER—Business of fair volume is being effected in a quiet way, but dealings are chiefly in moderate-sized lots of the metal, as usual at this season of the year. Sellers hold prices quite firmly, quoting 11c. for Lake Superior, 10¾ to 10⅞c. for electrolytic and 10½ to 10¾c. for casting stock. London cables were firmer in tone, but quoted only slight change in prices.

PIG LEAD—The demand continues slow, and the market is still in somewhat uncertain position, since buyers and sellers continue equally backward about making any

new move. Prices stand at about 3.70 to 3.72½c. for common. London cable quoted £12 11s. 3d. for soft Spanish.

SPELTER—There is small business only, and the demand continues spiritless in this locality. Prices are still unsettled and weak, with 3.85 to 3.95c. quoted for ordinary Western. London cable was unchanged, quoting £18 2s. 6d. for good merchant brands.

ANTIMONY—The demand is of about usual character, and prices remain steady at 7¼ to 8¼c., as to brand.

TIN PLATE—Merely fair orders for American cokes are being placed, and business in other kinds is on a very moderate scale. Prices remain without change.

IRON AND STEEL—There is only moderate business in pig iron, aside from an occasional good-sized contract for four to six months' delivery, and the general condition of the market is much the same as for a considerable time past, with no important changes in prices. Manufactured products are also unchanged and generally rather quiet.

NEW HOCKEY SKATE SCREW.

The Canada Screw Company is turning out something unique in the screw line. It is a screw for fastening hockey skates to the boot, and is designed to do away with the necessity of persons using hockey skates being compelled to keep the skates fastened to one pair of boots. The screw is in two parts. One consists of a screw with a threaded hole drilled in it. This part is inserted in the sole of the boot as a permanent fixture. When it is desired to place the skate on the foot the other part of the screw is inserted through the hole in skate and then screwed into the hole of the other part in the boot. The inventor of the screw is Mr. Robert Dack, of E. Dack & Son, Toronto.

A PROGRESSIVE HARDWAREMAN.

The business of Mr. A. E. Bottum, hardware merchant, Bobcaygeon, has increased to such an extent that he has found it necessary to put an addition of about 50 feet by 25 to the rear of his store, besides which he has put in an elevator. He has wisely put a large window in the rear of the addition, which ensures good light throughout the whole store. Mr. Bottum has now one of the best hardware stores in any country town in Ontario.

ACME and HOCKEY SKATES



Variety of Patterns in Stock.

LAMPLOUGH & McNAUGHTON, 59 St. Sulpice Street, MONTREAL.

ILL WITH TYPHOID.

HARDWARE AND METAL regrets to learn of the serious illness of Mr. William Heard, who is associated with his father in conducting a hardware store in Fenelon Falls. Typhoid fever is the trouble, and Mr. Heard has been in bed about five weeks. He is reported to have taken a change for the better within the last few days. The patient does the buying for his father besides relieving the latter of other onerous duties, and he is naturally being greatly missed from the store, at this season of the year particularly. It is to be hoped his recovery will be speedy.

BUSINESS CHANCE.

WANTED TO EXCHANGE ONE OR TWO good Farms in the Northwest for stock of Hardware. Address Jas. W. Fullbrook, Stonewall, Man. (52)

SITUATION WANTED

WANTED SITUATION AS HARDWARE TRAVELLER for Manitoba and N. W. T.; 30 years' experience in the trade; thoroughly posted in Carriage and Saddlery Hardware; first-class reference. Address "Hardware," c/o. HARDWARE AND METAL, Toronto, Ont. (52)

FOR SALE.

THE BEST HARDWARE BUSINESS IN ONTARIO; no opposition; the best stand in town; stock about five thousand. For further particulars address Box D, HARDWARE AND METAL. (t.f.)

STOCK OF HARDWARE; WELL ASSORTED, almost new; in a thriving town on the Ottawa, between Ottawa and Pembroke; population 4,000; satisfactory reasons given for selling. Address A. B., HARDWARE AND METAL. (3)

R. C. LEVESCONTE

Barrister, Solicitor, Notary, Etc.

THE MCKINNON BUILDING
Cor. Jordan and Melinda Streets

... TORONTO

Telephone 689.
Cable "LeVesconte" Toronto.

Agencies wanted

W. J. Woodburn, Manufacturers' Agent,
Room 45, Temple Building, Montreal,

is open for engagement to represent any wholesale house or manufacturer. Best of references furnished, English and Canadian.

W. GORDON & CO.

SCALE MANUFACTURERS

587 St. Paul Street

Montreal

All kinds of Scales
made and repaired.

Write for Catalogue.



CLIMBING OVER THE PASS.

THE route over the mountains is championed by Joseph Ladue, the founder of Dawson City, who has been in the gold region for several years and possesses large interests there. He has written a book about the whole question.* He thinks the traveler should go across the continent by railway and then by steamer up the Pacific Coast to Juneau, Alaska, and on to Dawson City by the pass and water ways. On arriving at the port on the Pacific Coast from which the gold-seeker intends to take passage for Juneau he ought to have at least \$500 (£100) for the purchase of outfit and supplies. The best time to start is about March 15 on this route. From Juneau the traveler journeys to Dyea by steamboat, a distance of 100 miles. At Dyea the outfit is packed to the foot of Taiya Pass. The length of this to its summit is 15 miles. From the summit to Lake Lindeman is 8 miles. At Lake Lindeman a boat is made from the materials in the outfit and the timber found by the lakeside. The lake is five miles long, and at the foot of it everything has to be portaged to Lake Bennet, less than a mile distant. Says Mr. Ladue: "Lake Bennet is 28 miles long, and while going through this lake the traveler crosses the boundary between British Columbia and the Northwest Territories (all British, of course). After going down Lake Bennet the traveler comes to Cariboo crossing, about four miles long, which takes him to Lake Tagish, twenty miles in length. After leaving Tagish he finds himself in Mud or Marsh Lake, 24 miles long, then into the Lynx River, on which he continues for 27 miles, until he comes to Miles Canyon, five-eighths of a mile long.

"Immediately on leaving Miles Canyon he has three miles of what is called bad river work, which, while not hazardous, is dangerous from the swift current and being very rocky. Great care has to be taken in going down this part of the river. He now finds himself in White Horse Canyon,

the rapids of which are three-eighths of a mile in length, and one of the most dangerous places on the trip. A man is here guarded by a sign 'Keep a good look out.' No stranger or novice should try to run the White Horse Rapids alone in a boat. He should let his boat drop down the river guided by a rope, with which he has provided himself in his outfit, and which should be 150 feet long. It would be better if the traveler should portage here, the miners having constructed a portage road on the west side and put down rollerways in some places, on which they roll their boats over. They have also made some windlasses, with which they haul their boat up the hill till they are at the foot of

all this time taking him down at the rate of five miles an hour. Of course, in the canyons it is very much swifter.

"The Little Salmon River takes him to Five Finger Rapids, a distance of 120 miles. In the Five Finger Rapids the voyage should be made on the right side of the river, going with the current. These rapids are considered safe by careful management, but the novice will have already had sufficient experience in guiding his boat before reaching them. From Five Finger Rapids the traveler goes six miles below, down the Lewis, to the Rink Rapids. On going through the Rink Rapids, he continues on the Lewis River to Fort Selkirk, the trading post of Harper & Ladue, where the Pelly and Lewis, at their junction, form the headwaters of the Yukon. You are now at the head of the Yukon River and the worst part of your trip is over. You now com-



This is the forest primeval. The murmuring pines and the hemlock
Stand like Druids of old, with voices sad and prophetic,
Stand like harpers hoar, with beards that rest on their bosoms.

the canyon. The White Horse Canyon is very rocky and dangerous and the current extremely swift. After leaving the White Horse Canyon he goes down the river to the head of Lake Labarge, a distance of 14 miles. He can sit down and steer with the current, as he is going down the stream all the way. It is for this reason that in returning from the diggings he should take another route, of which he will get full particulars before leaving Dawson; therefore I do not take the time to give a full description of the return trip via the Yukon to St. Michael. He now goes through Lake Labarge—for 31 miles—till he strikes the Lewis River, this taking him down to Hootalinqua. He is now in the Lewis River, which takes him for 25 miles to Big Salmon River, the current

mence to go down the Yukon, and, after a trip of 98 miles, you are in the White River. You keep on the White River for 10 miles, to the Stewart River, and then 25 miles to Fort Ogilvie. You are now only 40 miles from Dawson City."

This rapid trip (on paper) sounds simple enough. But in reality it is a hard and perilous journey. The Taiya Pass, one traveler says, is not a "pass" at all, but a straight climb over the mountains. The incline he puts at an angle of 55 deg., and this, with fifty pounds or so of goods upon the back, is a pretty tough struggle for a strong man. In May the summit was covered with snow, and the trail in some places, besides being a steep descent, sometimes compels the traveler to go through water and slush two or three feet deep.

* "Klondyke Facts," By Joseph Ladue; 50c. John Lovell & Co., Montreal.

BUSINESS CHANGES.**DIFFICULTIES, ASSIGNMENTS, COMPROMISES.**

HAMPTON & CO., general merchants, Mount Forest, Ont., have assigned to J. W. Lawrence, Toronto.

Wm. Dorman, tinsmith, Canning, N.S., has assigned.

D. McIntosh, general merchant, Dauphin, Man., has assigned.

Guillaume Cusson, wood and coal dealer, Montreal, has assigned.

Frs. Lemieux, general merchant, Buckland, Que., has assigned.

K. W. Reimer, jr., general merchant, Steinbach, Man., has assigned.

R. E. Porritt, general merchant, Milton, Ont., has assigned to C. S. Scott.

Levi Kert, general merchant, Calumet, Que., is offering 40c. on the dollar.

J. H. Armear, general merchant, Commercial Cross, P.E.I., has assigned.

N. W. Prout, sawmiller, Oil Springs, Ont., has assigned to Wm. G. Owens.

Pierre Gilenas, general merchant, St. Alexis Des Monts, Que., has assigned.

McIntosh & Hosegood, general merchants, Dauphin, Man., have assigned.

Philibert Gagnon, general merchant, Grand Baie, Que., is offering 50c. on the dollar.

John J. Hennessey, general merchant and fish dealer, Harbor Grace, Nfld., has assigned.

John Tyne, general merchant, Chelmsford, Ont., has assigned to J. H. Clary, Sudbury.

H. Longhurst, stained glass dealer, Hamilton, has assigned to C. S. Scott, Hamilton.

C. L. Street & Co., saw millers, Chilliwack, B.C., have satisfied a chattel mortgage of \$1,500.

Bligh & Prince, dealers in agricultural implements, Truro, N.S., has assigned, with liabilities about \$7,000.

McMurtry Bros., general merchants, Midland, Ont., have assigned to E. R. C. Clarkson, Toronto, and their stock has been sold.

Edward Paquette, general merchant, Nairn Station, Ont., has assigned to T. A. Ouillet, Sudbury, Ont., and a meeting of the creditors will be held on the 28th inst.

PARTNERSHIPS FORMED AND DISSOLVED.

MacPhaile & Lloyd, bicycle dealers, Montreal, have dissolved.

Daignealt, Primeau & Co., blacksmiths, have registered partnership in Montreal.

Fontaine & Deschambault have started business as carriage makers at St. Remo, Que.

Dalton Bros. have succeeded M. P. Dalton, general merchant, Bloomfield, P.E.I.

McCallum & Blatchford have leased the grist mill of D. R. Fraser, Edmonton, N.W.T.

Achille Delorme and Maxime Delorme have registered as proprietors of the hardware firm Delorme & Frere, Montreal.

Charles A. Prevost and Joseph Trudel have registered as proprietors of the firm Prevost & Trudel, contractors, Montreal.

Stickney Bros., hardware and fancy goods dealers, St. Andrews, N.B., have dissolved, George H. Stickney to continue.

SALES MADE AND PENDING.

The Kootenay Wire Works Co., Trail, B.C., have sold out to S. D. Weaver.

Malvina Goudron, hardware merchant, Vancouver, B.C., is offering to sell out.

Wm. D. Howatt has commenced business as blacksmith in Carleton Corner, P.E.I.

The stock of E. McGee, general merchant, Rimouski, Que., has been sold at 55c. on the dollar.



The assets of Edward Duckett, general merchant, St. Gregoire, Que., were sold at 38c. on the dollar.

The stock of J. G. Trahan, general merchant, St. Hyacinthe, Que., has been sold at 62½c. on the dollar.

The assets of Joseph Lelang, general merchant, Killaloe, Ont., will be sold by auction on the 27th inst.

FIRES.

The packing room of the Diamond Glass Co., Limited, Montreal, has been damaged by fire; insured.

Tate & Bateson, planing mill owners, and Robert Whaley, blacksmith, Bracebridge, Ont., have been burned out.

DEATHS.

M. L. Russell, lumber merchant, Renfrew, Ont., is dead.

Joseph C. Arsenaault, of J. C. Arsenaault & Son, general merchant, Wellington, P.E.I., is dead.

DOMINION TRAVELERS' OFFICERS.

Hon. J. D. Rolland is again president of the Dominion Commercial Travelers' Association, having received 914 votes to Mr.

Max Murdoch, his opponent, 798, thus giving him a majority of 116.

For the treasurership Mr. Fred. Birks, who has filled the office for many years, was defeated by Mr. Thomas L. Paton by 962 votes to 709, or a majority of 253.

This was the result of the voting announced at the annual meeting of the association on Saturday night. The total number of ballots cast was 1,744, and of these 34 were rejected for the following causes: Not signed, 20; names not on list, 3; not marked, 5; voted twice, 6.

The other officers were elected by acclamation at the quarterly meeting held some time ago.

A PRIZE-WINNING FILE FIRM.

One of the really first-class files placed on the Canadian market is the "Black Diamond," manufactured by the G & H. Barnett Co., Philadelphia, Pa. The quality of the goods manufactured by this company



is attested by the fact that they received at the Tennessee Centennial Exposition, held recently at Nashville, a silver medal for the excellence of their display. This award is the more remarkable inasmuch as this was the highest—in fact, the only—award given for such goods, though there were many competitors. The accompanying cut is a fac simile of the obverse and reverse of the medal awarded them.

TRAVELERS' MUTUAL BENEFIT.

The Commercial Travelers' Mutual Benefit Society elected the following officers on Saturday by acclamation: President, Henry Goodman; vice-president, S. R. Wickett; treasurer, Warring Kennedy. Nominated as Toronto trustees, four to be elected: J. A. Ross, H. Lamont, D. A. Rose, J. Knox, J. T. B. Lee, W. F. Smith, Joseph Devaney, G. E. Bradshaw.

TORONTO CITY TRAVELERS.

The City Travelers' Association held its election of officers last Friday evening, at which the following were appointed for the ensuing year:

President—G. B. Curran (acclamation).
1st Vice-President—W. J. Parks (acclamation).
2nd Vice-President—J. W. King.
Chaplain—E. Davis.
Treasurer—James Mortimer (re-elected).
Secretary—Jerry Burns (re-elected).

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CAVERHILL'S BUILDINGS,
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Montreal, Dec. 21, 1897.

To the Trade :

We wish to thank you for the liberal patronage extended to us during the past year, and beg to inform you that any orders entrusted to us will receive prompt and careful attention.

Caverhill, Learmont & Co.

THE COST OF MINING.

THE following very interesting figures are obtained from the annual report of John B. Hastings, general manager and superintendent for the War Eagle Consolidated Mining and Development Co. The table of mine costs is specially complete and is an authoritative statement of the costs of mining operations in the big properties of this camp.

Mr. Hastings' statements show that the total average cost of tunnelling or drifting is \$20.11 3/4; of raising, \$30.33; of sinking, \$92.28 3/4.

The figures showing the cost of ore extraction reveal that the average cost of breaking down ore in the stopes is \$2.80, and of breaking down and getting on cars, \$3.24 3/4.

The tables are as follows:

TABLE OF MINE COSTS.

From Jan. 20 to Sept. 30, 1897:

	Tunnel- ling, Drifting, etc.	Raising.	Sinking.
Total number of feet.	2,303 1/2	421	175
Average cost for:			
Drilling	6.58 1/2	9.44 1/2	32.43 3/4
Mucking	2.95 1/4	3.95 1/4	3.80 1/4
Timbering .....	.01 1/2	3.14	7.07 1/4
Smithing	1.18	1.22 1/4	3.91 1/2
General labor	1.76 1/4	2.46 1/2	7.80
Hoisting .....	.27 3/4		5.64
Air	1.51 1/4	2.12	7.61
Explosives	2.08 1/4	2.76 1/2	7.37 1/2
Candles .....	.21 1/2	.30 1/4	.98 1/2
Drill fittings .....	.10 3/4	.25 1/2	.61 1/2
Lubricating oil .....	.04 1/2	.05	.19
General mine supplies .....	.72 1/4	1.10	3.33 1/2
Surveying .....	.12 3/4	.07	.47 1/2
Office expenses .....	.18 1/4	.27	.75
Legal expenses .....	.05 1/4	.08 1/4	.26 1/4
General expenses .....	.34 1/2	.44 1/2	1.12
Salaries	1.18 1/2	1.75	5.76 1/2
Depreciation .....	.65	.95	3.05 1/4
Total average cost	20.11 3/4	30.33	92.28 3/4

ORE EXTRACTION.

	Shipped from stopes.	Broken down in stopes. Not shipped.
Tons of Ore	4,810 3/4	1,059
Average cost for:		
Drilling	0.94	0.90
Mucking .....	.44 1/2	.08 1-5
Timbering .....	.31 1/2	.35 1/2
Smithing .....	.10 1/2	.16 4-5
General labor .....	.23 1/4	.23 1/2
Hoisting		
Ore sorting .....	.16 1/4	.01 4-5
Air .....	.18	.21 1/4
Explosives .....	.27	.29 3-5
Candles .....	.03	.03 1/4
Drill fittings .....		.05 1/2
Lubricating oil .....	.00 1/2	.00 2-5
Genl. mine supplies .....	.13 1/4	.04 4-5
Assaying .....	.07	.10 3-5
Surveying		
Office expenses .....	.02 1/4	.04 4-5
Legal expenses .....	.01 1/4	.02 3-5
General expenses .....	.03 1/4	.05
Salaries .....	.19 1/4	.10 1-5
Depreciation .....	.09	.08 3-5
Total average cost	3.24 3/4	2.80

During the progress of tunnelling and drifting, raising and sinking, 650 tons of ore were produced, of which 600 tons were

shipped; 50 tons are yet in chutes, entailing a further cost of:

	Tunnel- ling.	Raising.	Sinking.
Ore sorting, per ft. ....	.00	.43 1/4	.00
Assaying, per ft. ....	.29 1/4	.45 1/4	.32

Or at cost per ton: Ore sorting, 23 1/2; assaying, \$1.43.

Of ore extracted, 100 tons were stoped by hand, costing \$7.28 per ton, the drilling alone being \$3.48.

COMPARATIVE STATEMENT OF COSTS.

Showing average cost per foot for period from January 20 to June 30, 1897, as compared with costs for period from July 1 to September 30, 1897, not including charge for depreciation in value of permanent tools, appliances, etc.

Nature of work.	Period.	Work accomplished.	Cost per foot.
Tunnel-ling, etc.	Jan. 20 to June 30.	1,271 feet	\$19.42
	July 1 to Sept. 30.	1,331 1/2 "	19.52
Raising ..	Jan. 20 to June 30.	288 1/2 "	29.17 1/2
	July 1 to Sept. 30.	132 1/2 "	29.84
Sinking ..	Jan. 20 to June 30.	90 1/2 "	55.05 1/2
	July 1 to Sept. 30.	76 1/2 "	81.74

The number of employes employed in the War Eagle and Crown Point mines have averaged 107, including in the boarding houses 9, and in the office 2.—Rossland Miner.

CLEANING AND STORING BICYCLES

WITH the first snowfall there are many who prepare to house their bicycles for the winter, and it is possible a few suggestions would be of interest to those who are interested in the silent steed.

In the first place, a dry place must be selected for the winter home of the bicycle, and the machine should be placed in such a position that the weight does not rest on the tires, as a tire, if compressed at a single point for any length of time, will take a permanent shape, conforming to the surface on which it rested, and the tire will no longer be mathematically correct on its outline. It is necessary that a bicycle should have a complete overhauling before being placed in winter quarters.

The following is the modus operandi which should be adopted in doing so: Beginning with the bearings in the front and rear wheels and crankshaft, which should be taken out and thoroughly washed in gasoline, caution is necessary that none of the gasoline comes in contact with the rim of the wheel, lest it should follow the nipples and thus reach the tire, as gasoline is a solvent of rubber, thereby having the effect of doing injury to the tire. Besides washing the bearings in this manner, the chain, fork, crown bearings and head should be treated in the same manner, the adjusting of the wheel should be attended to with great care, and in tightening up the spokes and

adjusting the bearings great care should also be taken. While adjusting the bearings, care should be used to detect damaged balls, cups, cones, etc. This can be done by the "feel" of the bearings.

Realizing the great amount of room that is necessary to perform the foregoing process, as well as the difficulty in procuring a suitable spot, many hardware dealers throughout the country are advertising the storage of wheels for the winter. The average charge is \$2 for storage and cleaning, which many people who use a wheel would rather pay than be bothered with it themselves, and as many firms have unused space in their store it would be a good investment as well as a good advertisement for next year's business. Try it for one year and see the results.



WANZER.

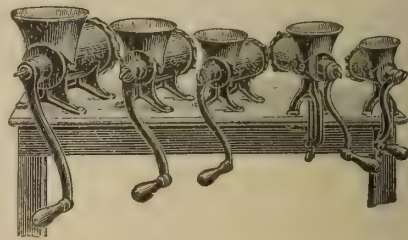
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PRICE
\$70.



No. 322 National Cash Register.

HARBOR OF ST. JOHN, N.B.

THE measure of a community's prosperity is dependent chiefly upon the enterprise and energy of the people within it and not upon the assistance of either the Federal or Provincial Governments. The Government may assist, but the great active force must be the community itself.

The accompanying illustration is a bird's eye view of St. John, N.B., and its harbor, a place which is an example of what a city can do for itself.

have paid out of their own pockets \$750,000 in order to provide facilities for carrying on the winter port business, feeling satisfied that the demand would come when our geographical position would show that trade had to come our way."

As a result of the expenditure of this \$750,000 the harbor of St. John now affords berths for five of the largest ocean going steamships afloat if they choose to all enter the port at once, while in addition to this each can have a distinct and separate warehouse, each of which is capable of holding

warehouses referred to have a frontage of 350 feet with a depth of 70 feet.

"A good many misstatements have been made in connecting St. John with fogs," remarked Mr. Fisher. "Now, while as a matter of fact we have during the summer a great deal of fog; in the winter, on the other hand, we have practically no fog. In proof of this, we have statistics extending over several years. They show the average duration of fog during the winter has been only fifteen or sixteen hours per month. You will readily see it cuts no figure at all.



As a harbor, and particularly as a winter port, St. John was evidently so intended by nature, but there were certain deficiencies which handicapped it in the competition with United States ports for the winter trade of the Atlantic. A few years ago the Board of Trade of the city, realizing what these deficiencies were, inaugurated an agitation for their removal, and the result is the facilities which the port now possesses.

When in Toronto the other day Mr. W. S. Fisher, of St. John, in referring to the efforts which had been made to improve the harbor, said: "The tax-payers of St. John

a whole cargo or more. The facilities for loading and unloading are all modern. The railway tracks are closely connected with the wharves, running close alongside the rear of the warehouses, while the wharves are connected with the large elevator which is shown in the accompanying illustration. A deputation representing some of the Atlantic steamship lines were in St. John a few weeks ago and they expressed themselves pleased and delighted with the warehouses and the general arrangements which had been made to accommodate steamships engaged in the winter carrying trade. The

In the summer a great deal of business is done at our port, but, of course, it is as a winter port that it chiefly ranks."

The shipments of freight from St. John last winter were 77,435 tons of produce, etc., 1,500,000 bushels of grain and 12,537 head of live stock. This freight was distributed as follows: To London, 24,000 tons; to Liverpool, 26,000 tons; to Glasgow, 18,000 tons; to Belfast and Dublin, 6,500; to Aberdeen, 2,900. In 1895 63 sailing vessels and 55 steamers carried 129,000,000 feet of lumber to the Old Country; in 1896 52 sail and 95 steam craft carried 168,000,-

ooo feet; and in the ten months of 1897, 52 sail and 180 steam craft carried 226,000,000 feet of lumber.

"This year's winter service is going to be much ahead of that of last year," remarked Mr. Fisher, in referring to the above figures, "We expect this largely because of the improved facilities of the port. We feel, however, that it takes time to establish trade. Trade runs in a rut, you know. Our desire now is to draw the attention of the importer to our port and urge upon him the policy of having his goods sent by an all-Canadian route, particularly when the railway and the steamship companies have between them made a guarantee that goods, either imported or exported, shall be brought in or carried out of the port of St. John at as low a rate of freight or lower than by any other Atlantic port. That being so, why should not patriotic Canadians arise and demand that their goods will be shipped by an all Canadian route? It is not a question between Halifax and St. John; it is between St. John and United States ports."

The list of steamships which will run in and out of St. John during the winter months was published in a recent issue of this journal.

PATENT REPORT.

Below will be found the only complete report of patents granted last week by the American Government to American inventors in lines appertaining to hardware. This report is especially prepared for this paper by Marion & Marion, head office, 185 St. James street, Temple Building, Montreal:

- No. 595,597—G. H. Blanchard, bread knife.
 595,424—A. Adams, latch.
 595,425—A. Adams, latch.
 595,426—A. Adams, latch.
 595,427—A. Adams, latch.
 595,676—J. A. Green, latch gate.
 595,543—G. R. Kress, tubular tripod brace for lighting rods.
 595,606—L. Crouch et al., 'ock.
 595,411—H. Renz, sad iron support.
 595,511—J. N. Ahrens, sash lock.
 595,502—E. A. Terpening, weighing scale.
 595,563—H. H. Forsyth, shade or curtain fixture.
 595,537—H. Foecke, sieve.
 595,640—F. Linnemeier, tongue iron.

A STOVE FOR CHINA.

Allan & McKenzie this morning packed a blue flame oil stove, which is to be taken by Miss Rebe McKenzie with her to China. It is the custom in China to give every caller a cup of tea, and as it is a difficult matter to keep the tea warm at all hours, and missionaries who have as far as possible adopted the native customs must comply with this established rule, Miss McKenzie will take the stove back with her for that purpose. Allan & McKenzie have also an application from a missionary in Asia Minor for one of these convenient appliances.—Reporter, Galt.

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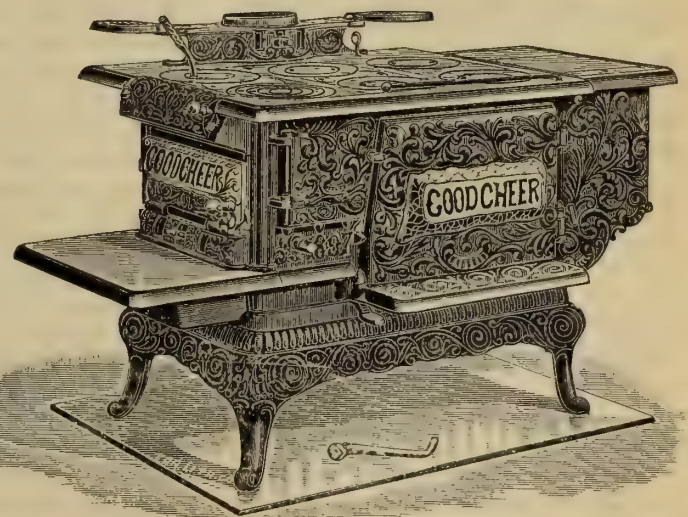
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WOODSTOCK, ONT.

DOMINION TRAVELERS' FINANCES.

THERE was some interesting criticism of the finances of the Dominion Commercial Travelers' Association at the annual meeting last Saturday. Mr. S. Woods was the critic, and he seemed to be thoroughly au fait with his subject.

Two letters read by Secretary Wadsworth were the primary cause. The first of these stated that the association was promising far more than it would be able to carry out, and before long the death claims and other payments and expenses would exceed the revenue, and the present capital and surplus funds would begin to diminish. This result was inevitable in a very few years, unless some changes were made in the meantime. It was a very difficult matter to place upon a sound basis an insurance scheme that had been worked upon an unsound basis for years; but no doubt the committee would be able to do something to strengthen the association, always keeping in view the other objects and purposes of the institution.

The second letter stated that the easiest way was to let the old claims work themselves out, and then start afresh on a firm basis. The death rate had been low, but that could not continue, unless there was a falling off of a large proportion of the older members and an accession of younger men.

PROOF OF HEAVY LIABILITIES.

Mr. Woods, in order to emphasize his contention that the association had heavy liabilities (over \$2,000,000 issued in policies and agreements to pay death claims), said that last year there were 28 deaths. The amount paid in by these 28 members was \$3,820; the amount paid out by the association was \$25,761. There was, he said, no other organization in the world where a man could put in a dollar and take out nearly nine. It would take \$396,233 to re-insure the lives of the members for the amount they now received, and therefore the association was short a great deal. In 1894 they paid in death claims \$7,600; in 1895, \$11,950; in 1896, \$20,500, and in 1897, \$26,000. It would only be one or two years at that rate before they infringed upon the so-called surplus. He held that it was one of the most sacred trusts of humanity to pay to the widow and orphan that which it had been promised they should receive. It was a very serious thing that there was no medical examination. It was time that some action was taken. The accident indemnity in 1896, he said, was \$3,596. Had the same happened this year there would have been the magnificent surplus of \$600 to carry to the good; and had the accident indemnity

increased as the mortuary had, there would probably have been a deficit. He asked the members, if they were shareholders in a joint-stock company, if they would be satisfied with a statement that always showed the net surplus and never the liabilities of the concern. From what he had learned, he was convinced that the association was offering more than it could well afford to give; and he did not think it was wise, or honorable or business-like for any association that promised insurance to juggle in any way with the interests of the widow and orphan. If that was the case, it was time that they begun a policy of retrenchment; and they should begin where common-sense dictated. He believed that there were very few life insurance corporations that took members in and allowed them any insurance indemnity, unless they passed a medical examination. He considered that the time had come when they should not allow any new member to reap the benefits of the association, unless he passed a satisfactory medical examination.

QUESTION OF HIGHER FEES.

If necessary, higher fees should be charged. If a man could not pass the examination, let him put up \$10 a year, and take what the association offered in the way of insurance for that sum. Criticising some of the items of expenditure, he thought if they were drifting astern financially, that \$1,063 for rent and taxes for the office was too much. He also thought that \$100 was too much for auditing a report that continually showed the net surplus, but never a liability, though every member of the association knew that it had very heavy liabilities. If they were on unsafe ground, it was time they remedied their position; so that a body of intelligent men, such as the commercial travelers were, should be able to face the world and say: "We are not playing at any game of life insurance we do not understand; but we are carrying on a business in which we know exactly where we are from year to year. In 1895 they had a surplus of \$7,064; in 1896, \$8,497; and in 1897, with an increased membership, they had only a surplus of \$4,196, which was \$2,868 less than in 1895, and \$4,301 less than in 1896, and that it must be borne in mind, was, after having abolished the accident insurance and weekly indemnity.

On his motion an advisory committee was appointed to confer with the directors as to the revision of the rates to be charged for mortuary benefits, with power to call for any necessary information, provided the directors approved of it; the committee to be composed of Messrs. D. Watson, Morin, Galbraith, Dr. Ault, Beech, George Sumner, Piche, S. Woods, and Wilkins.

A COLUMN OF CHRISTMAS POETRY.

THE CHRISTMAS HOLLY.

The holly! the holly! oh twine it with bay—
Come, give the holly a song,
For it helps to drive stern Winter away,
With his garments so sombre and long.
It peeps through the trees with its berries of red,
And its leaves of burnished green,
When the flowers and fruits have long been dead,
And not even the daisy is seen.

Then sing to the holly, the Christmas holly,
That hangs over peasant and king;
While we laugh and carouse 'neath the glittering boughs,
To the Christmas holly we'll sing.

The gale may whistle, and frost may come,
To fetter the gurgling rill;
The woods may be bare, and the warblers dumb—
But the holly is beautiful still.
In the revel and light of princely halls
The bright holly branch is found;
And its shadow falls on the lowliest walls,
While the brimming horn goes round.

Then drink to the holly, etc.

The ivy lives long, but its home must be
Where graves and ruins are spread;
There's beauty about the cypress tree,
But it flourishes near the dead:
The laurel the warrior's brow may wreath,
But it tells of tears and blood.
I sing of the holly, and who can breathe
Aught of that that is not good?

Then sing to the holly, etc.

—Eliza Cook.

EMPTY STOCKINGS.

Oh, mothers in homes that are happy
Where Christmas comes laden with cheer,
Where the children are dreaming already
Of the merriest day in the year.

As you gather your darlings around you
And tell them the "story of old,"
Remember the homes that are dreary!
Remember the hearts that are cold!

And thanking the love that has dowered you
With all that is dearest and best,
Give freely, that from your abundance
Some bare little life may be blessed!

Oh, go where the stockings hang empty,
Where Christmas is naught but a name,
And give—for the love of the Christ-child!
'Twas to seek such as these that He came.

—Ellen Manly in Christmas Ladies' Home Journal.

JEST 'FORE CHRISTMAS.

For Christmas, with its lots and lots of candies,
cakes and toys,
Was made, they say, for proper kids, an' not for
naughty boys;
So wash your face an' brush your hair, and mind
your p's and q's.
And don't bust out your pantaloon, and don't
wear out your shoes;
Say "Yessum" to the ladies, an' "Yessur" to the
men,
An' when they's company, don't pass your plate for
pie again;
But thinkin' of the things yer'd like to see upon
that tree,
Jest 'fore Christmas be as good as yer kin be!

—Eugene Field.

HAPPY THOUGHT.

The world is so full of a number of things,
I'm sure we should all be as happy as kings.

—R. L. Stevenson.

Emery and Hardware Specialties
COOKE HARDWARE CO.
 HAMILTON, ONT.

McDONALD & ALLEN
 KINGSTON
 Manufacturers of

**Door Knobs, Japanned, Nickel, Silver and
 Bronze Plated and Real Bronze.**
 Sold by all Jobbers.

We are the Oldest and Largest Manufacturers of

SCREWS and BICYCLE PARTS

in the Dominion. You know what that means, that if you want proper goods at proper prices you should write us, which please do if interested.

The...

John Morrow Machine Screw Co.
 Ingersoll - Ontario.

CAUSES OF FAILURE

In the Hardware Trade and How Avoided.

As long as there are failures, subjects that furnish information how to prevent them will always be timely. We have published, in pamphlet form, three admirable papers on the above topic, in which Over-Stocking, Expense, Capital, Credit, Discounts, Buying, etc., etc., are ably discussed. We will mail the whole three essays to any address on receipt of

10 cents

HARDWARE AND METAL, Toronto

.. ISLAND CITY .. Paint and Varnish Works

.. Manufacturers of ..

PAINTS, COLORS AND VARNISHES.

WAREHOUSES: 100 and 102 Bay St., TORONTO.
 188 and 190 McGill St., MONTREAL.
 WORKS: 274 St. Patrick St., MONTREAL.

**The Niagara Falls
 Metal Works Company, Limited**
 Niagara Falls - Ont., Canada
MANUFACTURERS

Brass Foundry, Brass Finishing,
 Light Drop Forging, Malleable
 Iron Foundry, Wire Chains,
 Safety Chains, Plumbers' Chains,
 Cut Link Steel Chains. Articles
 cut, formed and stamped from
 Sheet and Band Steel, Iron, Brass,
 Copper, German Silver and Alu-
 minum. Close Plating and Elec-
 tro-Plating.

QUEBEC BOARD OF TRADE.

AT the annual meeting of the Quebec Board of Trade the only business of importance transacted was the adoption of the report, which covered exhaustively the year's work.

Certain mineral oils are found to be in serious competition with Canadian fish oils for many purposes, as is also Newfoundland fish oil. The board favors a maintenance of the duties upon the former, and the imposition of an import tax of 20 per cent. upon the latter.

The question of having a bankruptcy law framed for the Dominion is very favorably looked upon.

The hope is expressed that the Quebec and Parry Sound Railway will be pushed to completion, as the saving of many hundred miles which this route effects will have a good influence on trade to the Atlantic.

The new board building is also noticed, and on the subject of membership it is reported that 60 new members came in last year, making in all 201 at present. A total of from 500 to 600 is looked for in the near future.

At the election of officers Hon. R. R. Dobell was put in nomination by his friends for a third term of the presidency of the board, but was defeated on a division of 43 votes for Mr. Dupre and 23 for the Hon. R. R. Dobell. The other officers were elected as follows: First vice-president, M. Joseph; second do., George Tanguay; secretary, N. Le Vasseur; treasurer, James Brodie. Board of Arbitration, Messrs. F. H. Andrews, jr., F. X. Berlinguet, John Breakey, Wm. Brodie, Geo. T. Davie, Felix Gourdeau, G. Le Moine, Wm. Macpherson, J. E. Martineau, J. C. McLimont, Narcisse Rioux, George E. Tanguay. Council, Messrs. F. H. Andrews, jr., Rodolphe Audette, P. J. Bazin, F. X. Berlinguet, N. Rioux, D. Arcand, Victor Chateauvert, E. B. Garneau, Jos. Gauthier, Arthur Paquet, C. E. Roy, E. G. Scott, Hon. R. R. Dobell.

PORCELAIN-LINED TINS.

Porcelain-lined tins are one of the newest inventions for packing salmon in on the market. They have been used by a reliable firm for some time. They say that they have no equal for preserving the fish. It is only a matter of time when the public will find this out. They will then appreciate the fact that the possibility of metallic corrosion is obviated by the use of porcelain jars. They then will insist upon having their salmon packed in this and no other way. By this method the fish does not come in contact with the tin at all, and provided only it be fresh when packed, it must necessarily remain so when cooked.

If you are thinking of enlarging your mill, foundry or machine shop, or of purchasing machinery of any kind, send us a line giving character of machinery needed.

We can put you in communication with manufacturers from whom you can buy advantageously.



VanTuyl & Fairbank
 Petrolia, Ont.

Headquarters for...

**Oil and Artesian Well
 Pumps, Casing, Tubing,
 Fittings, Drilling
 Tools, Cables, etc.**



**BROOM AND CORDAGE
 WORKS.**

WELFORD BROS.

Manufacturers of

Brooms and Whisks, Leather, Web
 and Rope Halters, Rope Cattle Ties
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IRON FENCING

and all kinds of

**Iron, Wire and Brass
 Work**

Address—

**Toronto Fence and
 Ornamental Iron Works**

(Joseph Lea, manager)
 ADELAIDE ST. WEST

PARIS ELECTRO PLATING CO.

Manufacturers of

Stove Trimmings, Piano and Organ Trimmings,
 Piano Stool Feet, Novelties, etc. Bicycle Work
 a specialty. Special attention given to Job
 Work of all kinds in Brass and Nickel Plating.

PARIS ELECTRO PLATING CO., Paris, Ont.
 Quotations gladly given.



COVERT MFG. CO.

West Troy, N.Y.

DERBY SNAP

Canadian Patent, April 3, 1897.

With Plated Rust Proof and Guarded
 Spring. "The Latest and Best." Sold
 by all Leading Jobbers in Canada.



**"JARDINE"
 TIRE UPSETTERS
 WILL UPSET TIRES**

Some machines sold as Upsetters will not. Perhaps you make as much money on the sale of a useless Upsetter as on a good one, but your customer does not. He don't want a machine because it is called an Upsetter; he wants a machine to upset tires. Sell him one of ours.

IT PAYS TO SELL THE BEST TOOLS

**A. B. JARDINE & CO.
 HESPELER, ONT.**

Plumber and Steam-Fitter

ACTION OF THE BUNSEN BURNER.

IN a lecture before the English Society of Arts, Prof. Vivian B. Lewis gives the following explanation of the action of the Bunsen burner of the cylindrical type:

In a Bunsen burner the chemical action which gives rise to the heating consists of two distinct combustions. The first takes place on the surface of the inner visible cone of the flame. Here the hydrogen and hydrocarbons of the coal gas undergo a partial combustion at the expense of the oxygen of the air, which has been previously mixed with the coal gas. This results in the combustion of the carbon to a mixture of carbon monoxide and dioxide, while some of the hydrogen is burned to water vapor. The outer flame is produced by the combustion of the hydrogen and carbon monoxide, escaping from the inner zone into the completed products of combustion, carbon dioxide and water vapor.

The characteristic appearance of the Bunsen flame varies according to the amount of air which is allowed to enter with the gas. Under normal conditions the zones of flame have a violet blue color, while as more and more air is allowed to enter with the gas the flame becomes fiercer and the inner zone acquires a green tint, and a still further addition of air causes the mixture to become so highly explosive that it flashes back into the tube of the burner. During this change in the color of the flame alterations are taking place in the temperature which the various parts of flame are emitting. The following table gives an approximate idea of the increase that takes place with the addition of more and more air, and which reaches its maximum as an explosive limit is approached:

	Blue inner cone. Degrees.	Greenish inner cone. Degrees.
Tip of inner cone.....	1,090	1,575
Centre of outer cone.....	1,533	1,630
Tip of outer cone.....	1,175	1,545
Side of outer cone, level with tip of inner cone.....	1,333	1,511

The ratio of gas to air in the blue and greenish non-luminous combustion is about—in the blue 1 volume of gas to 2.27 of air, and in the green 1 volume of gas to 3.37 of air.

The reason of this increase of temperature is that the less air that is supplied to the

centre of the flame the more has to be introduced from the exterior, and while the interior supply has been heated in its passage up the hot tube and by partial combustion in the inner zone, the outer supply is cold; and as not only the oxygen which is used by the flame, but also four times its volume of diluting nitrogen, has to be heated, it is manifest that the less external air that is sucked into the flame the higher will the temperature of the external portion of the flame become; and as it is this part of the flame which is utilized for heating incandescent mantles, it is clear that this will give a gain in the amount of light to be obtained from the mantle itself.

In the Bandsept burner it is possible to so regulate the mixture of the air and gas that not only is the green zone in the interior of the flame formed, but owing to the explosive point being reached it is drawn down on to the surface of the top of the gauze forming the atomizers or mixers, through which, however, it is unable to pass. The flame then consists of what is, practically, only the outer cone of the ordinary Bunsen, and, being fairly homogeneous, has a greater equality in temperature than can be obtained with the ordinary flame.

DIAMONDS IN A WATER PIPE.

Four diamond rings worth \$1,800 were lost by Mrs. Caldwell, of Media, Pa. The gems were carelessly left on a stand in the bathroom, wrapped in tissue paper, which a servant threw into the water sink.

All the water pipes connected with the hotel bathroom were torn out and carefully examined. As a last resort, the waste pipe emptying into a creek was examined, and

in a section of this pipe, only a few yards from the creek, the valuables were located. They were found with the water-soaked tissue paper wrapped around them.

PIPE FOR WATER WHEEL SUPPLY.

FROM J. T. M., Manchester, N. H.—Will you be kind enough to give me a little information on the following question: How large a pipe is needed to supply a water wheel with an outlet of 20 square inches with a 33-foot head, so as not to have too much loss by friction? The pipe will at one place drop 15 or 20 feet, with two elbows. The length of the pipe is about 100 feet. About how much lead should be put into a joint on a 16 or 18 inch pipe for water supply with a 33-foot head?

Answer.—The 20 square inches outlet under 33 foot head will vary very considerably in its volume of flow by its form, or whether cut up in a number of openings, as in a turbine wheel. A narrow wheel gate, say 1 inch wide by 20 inches in length, will pass 380 cubic feet of water per minute under 33 foot head. The friction of the water in the 100 feet of pipe with two easy elbows will amount to $\frac{1}{2}$ foot from the head with an 18-inch pipe, and to nearly 1 foot with a 16 inch pipe. We recommend the 18-inch pipe as the most desirable size. There is considerable difference in the socket area of cast iron pipe by different makers for the same sizes. We can only estimate for the mean dimensions at 25 pounds lead per joint for 18-inch pipe and 20 pounds per joint for 16-inch pipe, the gasket and bead occupying 1 inch in length of a socket 4 inches in depth.—The Metal Worker.

ARMSTRONG PIPE THREADING AND CUTTING-OFF MACHINES

(Hand or Power)

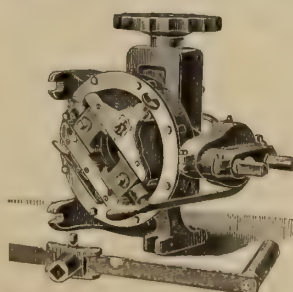
Armstrong's Adjustable Stocks and Dies, Vises (hinged), Wrenches, Pipe Cutters, Clamp Dogs, etc.

Our goods are of the highest grade, and are celebrated for their time and labor saving qualities. Send for catalogue.

THE ARMSTRONG MFG. CO.

New York Office,
139 Centre Street

Bridgeport, Conn.



New No. 0 Threading Machine.

CURTIS & CURTIS

No. 23 Garden St.
Bridgeport, Conn.

MANUFACTURERS OF

Forbes' Patent Die Stock

FOR HAND OR POWER.

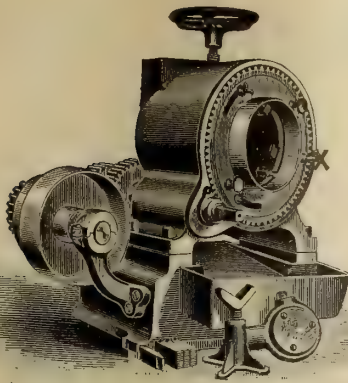
OUR HAND MACHINES are the only portable hand machines in the market with which one man can cut off and thread large pipe up to eight inches diameter without assistance. Two and three inch pipe is threaded by using only one hand on the crank, thus saving much time and hard labor.

OUR POWER MACHINES occupy less floor space, require less power to run them, are more simple of construction and are far cheaper than any other make of machine of the same range in the market.

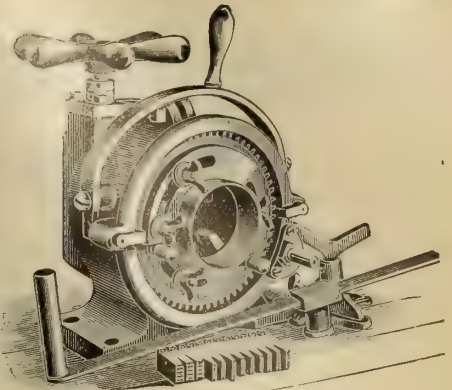
The Curtis Pipe Threading Attachments for Lathes thread all sizes of pipe from $\frac{1}{4}$ to 8 inch, and attachable to any make or size of lathe. Cheaper than any power pipe threading machine in the market. Machines for American or English Standard of pipe threads furnished without extra cost.

Ratchet Drills. Ratchet Die Stocks.
Malleable Iron Pipe Vises.

SEND FOR ILLUSTRATED CATALOGUE.



No. 78 Hand or Power Pipe Cutting and Threading Machine.
Range $2\frac{1}{2}$ to 4 inch. R. R.



No. 30 Hand Pipe Cutting and Threading Machine.
Range $\frac{1}{4}$ —2 inch. R. & L.

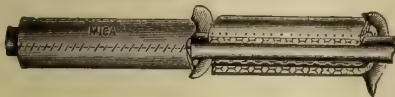
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30 St. Francois Xavier St., MONTREAL.

Agent for: Spear & Jackson, Sheffield, saws, tools, etc.,
H. Coghill & Sons, Newcastle, borax, etc.; Starr Mfg. Co.
Halifax, N.S., skates; Atkinson Bros., Sheffield, cutlery.

Wholesale trade only.

MICA PIPE COVERING



Manufactured only by The Mica Boiler Covering Co., Ltd., also all kinds Mica Coverings for Boilers, Steam Pipes, Furnaces, etc. Office and Factory

9 Jordan St., TORONTO, CANADA.

CANFIELD'S MOULDED RUBBER GOODS

RUBBER HEADED NAILS

GLASS GAUGE

GASKETS, RINGS, BUMPERS.

BOILER GASKETS

SMALL
RUBBER
GOODS

H. O. CANFIELD - BRIDGEPORT, CT.

MOULDED
RUBBER
GOODS

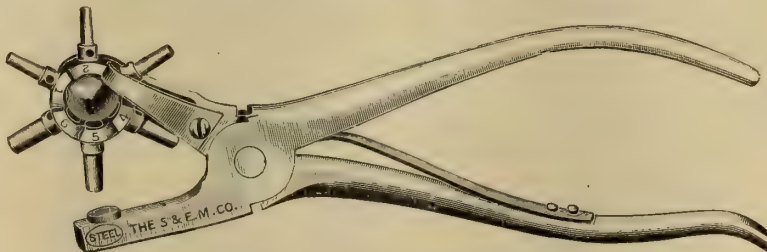
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OUR GOODS ARE WELL KNOWN IN CANADA

No. 3

1897
CATALOGUE

Send for it



NEW REVOLVING PUNCH

Mention this paper,
Canadian HARDWARE
AND METAL.

The SMITH & EGGE MFG. CO., Bridgeport, Conn., U. S. A.

PLUMBING AND HEATING CONTRACTS.

FIDDES & HOGARTH, Toronto, have the contract for the hot-water heating, gas-fitting, plumbing and wiring for a large store on Yonge street, Toronto.

Guest & Co., Toronto, have the plumbing contract for a house on Sherbourne street, Toronto.

The John Ritchie Plumbing and Heating Co., Limited, Toronto, have the contract for the plumbing, hot-water heating and gas-fitting of the Industrial Refuge, Belmont street, Toronto. This is an extensive contract, as over 70 radiators are needed, there

being 3,000 feet of hot-water radiation. There are also needed two hot-water boilers, eleven water-closets, ten basins, six baths, two urinals and eleven wash tubs.

PLUMBING AND HEATING NOTES.

The assets of H. Creed & Son, plumbers, Montreal, are to be sold.

The Guelph Gas Generator Co., Limited, Guelph, Ont., have been incorporated.

Ovide Vezina, plumber, Montreal, has ceased doing business under the style Martin & Vezina.

Building permits have been issued in Hamilton to A. W. Peene for a brick

addition to the Hamilton and Toronto Sewer Pipe Co.'s building on Wentworth street north, to cost \$4,500, and to Joseph Martin for a two-storey brick dwelling on Hannah street west, to cost \$1,000.

Emma Asselin, wife of Ovide Corbeille, has registered as proprietress of the plumbing firm O. Corbeille & Co., Montreal.

Building permits have been issued in Toronto for the following works: House of Industry, a two-storey addition, to cost \$5,000; J. R. Barber, three-storey addition to warehouse, northeast corner Jarvis and Duke streets, to cost \$3,200; Estate James Murray, alterations and additions to 36-38-40 Wellington east, to cost \$4,000; C. R. Rundle, a pair of dwellings on Wellesley, near Bleecker, to cost \$5,500.

Wads.—Baldwin		per lb
Best thick white felt wadding, in ½-lb bags.....	1 00	
Best thick brown or grey felt wads, in ½ lb. bags.....	0 70	
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges.....	0 99	
Best thick white card wads, in boxes of 500 each, 10 gauge.....	0 35	
Best thick white card wads, in boxes of 500 each, 8 gauge.....	0 55	
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges.....	0 20	
Thin card wads, in boxes of 1,000 each, 10 gauge.....	0 25	
Thin card wads, in boxes of 1,000 each, 8 gauge.....		
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Pe M	
11 and smaller gauge.....	0 60	
9 and 10 gauges.....	0 70	
7 and 8 gauges.....	0 90	
5 and 6 gauges.....	1 10	
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—		
11 and smaller gauge.....	1 15	
9 and 10 gauges.....	1 40	
7 and 8 gauges.....	1 65	
5 and 6 gauges.....	1 90	
Anvils.		
Per lb.....	0 10	0 12½
Anvil and Vice combined, each.....	4 50	
Wilkinson & Co.'s Anvils, lb.....	0 09	0 09½
Wilkinson & Co.'s Vices, lb.....	0 09½	0 10
Augers.		
Gilmour's, discount 65 p.c. off revised list.....		
Hollow Stearn's, per dozen.....	13 00	20 00
Adjustable Stearn's, each.....	4 50	6 50
Post-hole, Vaughan's, each.....	1 35	1 60
Excelsior, Jennings', discount 50 per cent.....		
Awls.		
Sewing, per gross.....	0 65	1 59
Pegging, ".....	0 65	1 25
Brad, ".....	0 85	1 60
" handled, per gross.....	3 60	30
Saddler's, per gross.....	0 45	1 60
Awl Hafts.		
Patent Peg, oss.....	7 25	8 00
" Sewing, per gross.....		
Awl and Tool Sets.		
Millar's Falls, per doz.....	2 80	3 30
AXES.		
Splitting Axes.....	5 25	5 50
Chopping Axes.....		
Black Prince.....	7 25	7 50
Forest Clipper.....	7 25	7 50
Lance.....	8 50	9 00
Mann's.....	8 00	8 25
Maple Leaf.....	9 50	10 00
Hand Made.....	7 50	7 75
Climax.....	8 00	8 25
Phantom.....	8 25	8 50
Axle Grease.		
Per gross.....	6 00	13 00
Bath Tubs.		
Zinc, discount.....	3 90	4 0
Copper, discount, 40 and 10 p.c. off revised list.....		
Steel clad, 20 per cent. discount off revised list.....		
Boxing extra		
Bells.		
Hand.		
Brass, 60 per cent.....		
Nickel, 55 per cent.....		
Door.		
Gon Sargent's.....	5 50	8
Peterboro', discount 50 per cent.....		
Cow.		
American make, discount 66½ per cent.....		
Canadian, discount 45 and 50 per cent.....		
Farm.		
American, each.....	1 25	3 00
House.		
American, per.....	0 35	0 40
Bellows.		
Hand, per doz.....	3 35	4 75
Moulders', per doz.....	7 50	10 00
Blacksmiths', discount 60 per cent.....		
Belting.		
Extra, 40, 10 and 10 per cent.....		
Standard, 45, 10 and 10 per cent.....		
Agricultural, 65 and 5 p.c.....		
Bench Stops.		
Per doz.....	5 00	6 00
Bits.		
Auger.		
Gilmour's, discount 65 and 5 per cent.....		
Excelsior, discount 60 per cent.....		
Rockford Common, 70 to 70 and 10 per cent.....		
" Perfection, 50 and 10 per cent.....		
Jennings' Gen., net list to 5 p. c. discount.....		
Car.		
Gilmour's, 47½ to 50 per cent.....		
Expansive.		
Clark's, per cent.....		
Excelsior, 10 per cent.....		
Gimlet.		
Clark's, per doz.....	0 65	0 90
Diamond, Shell, per doz.....	1 00	1 50
Nail and Spike per gross.....	2 25	5 20

Blind Rollers.		
Annex, per doz.....	1 25	1 75
Mascott, ".....	1 35	1 85
Erminie, ".....	1 00	0 00
Blind and Bed Staples.		
sizes, per lb.....	0 7½	0 12
Bolts.		
Carriage, dis., 60 and 10 to 70 p.c. off new list		
Tire, dis., 70 and 5 per cent.....		
Stove dis., 70 per cent.....		
Elevator, dis., 85 to 40 per cent.....		
Machine, dis., 70 p.c.....		
Coach Screws, dis., 80 p.c.....		
Boring Machines.		
Complete, with augers, each.....	5 00	7 50
Braces.		
Barber's.....	6 00	7 75
Barber's Ratchet.....	10 00	11 00
Farmers.....	2 00	2 75
Millar's Falls.....	15 50	29 00
Brackets.		
Shelf.		
Japanned Canadian, per doz.....	0 50	3 40
Berlin Bronze Canadian.....	0 85	3 20
Broilers.		
Light, dis., 65 to 67½ per cent.....		
Reversible, dis., 65 to 67½ per cent.....		
Vegetable, per doz., dis. 37½ per cent.....		
Henis, No. 8, ".....	6 00.	
Henis, No. 9, ".....	7 00	
Queen City ".....	7 50	10 00
Butchers' Cleavers.		
From 8 to ch, per doz.....	4 23	
Butts.		
Brass.		
Wrought Brass, dis., 17½ p.c. revised list.....		
Cast Iron.		
Loose Pin, dis. 70 per cent.....		
Wrought Steel.		
Fast Joint, dis. 70 and 10 to 70, 10 and 5 p.c.		
Loose Pins, dis. 70 and 10 to 70, 10 and 5 p.c.		
Berlin Bronzed, dis. 70, 70 and 5 per cent.....		
Gen. Bronzed, per pair.....	0 40	0 65
Can Openers.		
Acme, per gross.....	9 00	10 00
Sardine Scissors, per doz.....	3 75	4 50
Card.		
Horse, per do.....	0 60	1 00
Carpet Stretchers.		
American, per doz.....	1 00	50
Bullards, per doz.....	6 50	
Carpet Sweepers.		
Bissell, per doz.....	22 50	
World, ".....	21 75	
Daisy, ".....	24 00	
Star.....	18 00	
Crown Jewel, per doz.....	29 00	
Grand Rapids, ".....	24 00	33 00
Cartridges.		
(See Ammunition.)		
Castors.		
Bed new list, dis. 55 to 57½ per cent.....		
Plate, dis. 52½ to 57½ per cent.....		
Cattle Leaders.		
Nos. 31 and 32, per gross.....	8 50	9 50
Cement.		
Canadian, Portland.....	2 50	
English.....	2 50	
Belgium.....	2 35	
Canadian hydraulic.....	1 10	
Figures are for barrel lots.		
Chalk.		
Carpenters' Colored, per gross.....	0 45	0 75
White lump, per cwt.....	0 60	0 65
Red.....	0 05	0 06
Crayon, per gross.....	0 14	0 18
Chisels.		
Socket, Framing and Firmer.		
American, dis. 75 to 77½ per cent.....		
Canadian, dis. 50 and 10 per cent.....		
Tanged firmer, per doz.....	0 85	4 00
Churns.		
Daisy or Leader, dis. from stock or factory		
60, 10 and 5 per cent.....		
Steel, net.....	3 00	
Clamps.		
Judds', dis. 20 per cent.....	3 00	10 00
Stearns, per doz.....		
Clips.		
Axle dis. 65 per cent.....		
Coffee Mills.		
Box.....	3 60	13 00
Side.....	3 60	4 00
Enterprise, No. 0.....	1 35	
" No. 2.....	70	
Compasses, Dividers, Etc.		
American, dis. 62½ to 65 pe cent.....		

Cradles, Grain.		
Canadian dis. 25 per cent.....		
Dies.		
Hart Mfg. Co. (pipe dies), (Amer. list), dis. 40 per cent.....		
Hart Mfg. Co. (bolt dies), (Amer. list), dis. 25 per cent.....		
Door Springs.		
Torrey's Rod, per doz..... (15 p.c.)	2 00	
Coil, per doz.....	0 88	1 60
English per doz.....	2 00	4 00
Draw Knives.		
American, dis. 70 and 10 per cent.....		
Canadian, dis. 25, 50 and 10 per cent.....		
Drills.		
Hand and Breast.		
Millar Falls, per doz.....	16 00	51 50
P. S. & W., dis. 40 per cent.....		
DRILL BIT.		
Morse, dis. 37½ to 40 per cent.....		
Standard, dis. 50 and 5 to 55 per cent.....		
ELBOWS.		
Storepipe.		
Per doz.....	85	1 70
Enameline.		
No. 4—3 dozen in case.....	\$4 50	
No. 6—3 dozen in case.....	7 50	
FAWCETS.		
Cork Lined, per doz.....	0 30	0 35
Wine, per doz.....	1 30	3 25
Star.....	2 80	3 90
Fenn's Corkstops, No. 2, per dozen.....	1 70	
Petroleum, per doz.....	4 50	6 50
FILES AND RASPS.		
Globe File Mfg. Co.'s dis., files and rasps, 60 and 10 to 70 per cent.....		
Toronto File Co.'s dis., files and rasps, 60 and 10 to 70 per cent.....		
Black Diamond, 50 and 10 to 60 per cent.....		
Kearney & Foote, 60 and 10 per cent. to 60, 10, 5.....		
Nicholson File Co., 50 and 10 to 60 per cent.....		
Heller's Horse Rasps, 50 to 50 and 5 per cent.....		
Jowitt's, English list, 25 to 27½ per cent.....		
American, 60 to 60 and 5 per cent.....		
Great Western, 60 and 10 per cent.....		
FLUTING MACHINES.		
Each.....	0 60	2 00
FORKS.		
Hay, manure, etc., dis., 60 to 60 and 10 p. c. revised list.....		
FREEZERS		
Ice Cream.		
Gem from \$1.25 to \$7 net.....		
White Mountain, dis. 50 p.c.....		
Arctic, dis. 50 p.c.....		
FRUIT PRESSES.		
Henis', per doz.....	3 25	3 50
Enterprise, dis. 10 per cent.....		
Shepard's Queen City, dis. 15 per cent.....		
FRY PANS.		
Acme, dis. 65 to 67½ per cent.....		
GAUGES.		
Marking, Mortise, Etc.		
Stanley's, dis. 50 to 55 per cent.....		
Wire Gauges.		
Winn's, Nos. 26 to 33, each.....	1 65	2 40
GLASS.		
Window.		
Box Price.		
Size	Per	Double
United	50 ft.	Per 100 ft.
Inches.		
Under 25.....	1 45	2 75
26 to 40.....	1 55	3 05
41 to 50.....	3 45	5 00
51 to 60.....	3 75	5 70
61 to 70.....	4 05	6 55
71 to 80.....	4 45	7 10
81 to 85.....	5 00	8 10
86 to 90.....	9 30	
91 to 95.....	10 70	
96 to 100.....	12 75	
101 to 105.....	14 25	
106 to 110.....	16 50	
GLUE POTS.		
Tinned, each.....	0 30	
Enamelled each.....	0 55	
GRINDSTONE FIXTURES		
P. S. & W., per doz.....	3 60	4 00

HAMMERS.		
Nail		
Maydole's, dis. 5 to 10 per cent.....		
25 to 27½ per cent.....		
Tack.		
Magnetic, per doz.....	1 10	1 20
Sledge.		
Canadian, per lb.....	0 07½	0 08½
Ball Pean.		
English and Can., per lb.....	0 22	0 25
HANDLES.		
Axe, per doz., net.....	50	2 60
Store door, per doz.....	1 00	1
Chest, per doz. pairs.....	0 40	2 50
Chisel.		
Firmer, per gross.....	3 00	4 50
Socket Firmer, per gross.....	3 25	8 00
Socket Framing, per gross.....	3 75	5 00
Fork.		
C. & B., dis. 45 per cent. rev. list.....		
Hoe.		
C. & B., dis. 45 per cent. rev. list.....		
Saw.		
American, per doz.....	1 00	1 25
Plane.		
American, per gross.....	3 15	3 75
Hammer and Hatchet.		
Canadian, 45 per cent.....		
Cross-Cut Saw.		
Canadian, per pair.....	0 15	0 0
HANGERS.		
Door, 4 and 5 inch, per pair.....	0 40	
Lanes, 50 to 50 and 5 per cent.....		
HATCHETS.		
Canadian, dis. 40 to 42½ per cent.....		
HINGES.		
Blind, Parker's, dis. 60 and 10 to 65 per cent.....		
" Shepard's Noiseless, dis. 60 per cent.....		
" Buffalo, dis. 60 to 70 p. c.....		
Light T and strap, 70 and 10 p.c.....		
Heavy, per lb.....	0 03½	0 04½
Screw hook and hinge—		
6 to 12 in., per 100 lbs.....		3 15
14 in. up, per 100 lbs.....		2 35
Screw, Eureka.....	1 13	1 80
Gate, Clark's.....	1 50	2 20
" Shepard's, dis. 50 to 60 per cent.....		
Spring.....	1 00	3 50
" Shepard's Samson.....		1 20
HOES.		
Garden, Mortar, etc. dis. 60 and 10 p.c. 1896 list.....		
Planter, per doz.....	4 00	4 50
HOOKS.		
Cast Iron.		
Bird Cage, per doz.....	0 50	1 10
Clothes Line, per doz.....	0 27	0 63
Harness, per doz.....	0 72	0 88
Hat and Coat, per gross.....	1 00	3 00
Chandelier, per doz.....	0 50	1 00
Wrought Iron.		
Wrought Hooks and Staples, Can., dis. 47½ per cent.....		
Wire.		
Hat and coat, dis. 60 to and 10 p.c.....		
Beit, per 1,000.....	0 60	2 70
crew, bright, Eng., dis. 60 per cent.....		
HORSE NAILS.		
Canadian, dis. 50 p.c.....		
Canada Horse Nail Co. "C" brand f.o.b. Montreal.....	50 p.c.	
"M" brand 50 p.c.....		
HORSE SHOES.		
F. o. b. Montreal and St. John, N. B.....	3 25	
Steel, ".....	3 50	

KNIVES.			Bailey's (Stan. R. & L. Co.), 50 to 50 and 5 p.c.			SCALES.			Leather carpet tacks		
Clausen, bread, cake, and paring knives, \$7.00			Miscellaneous, dis. 25 to 27½ per cent.			Gurney Scales, 50 p.c.			Trunk nails, black and tinned		
doz. sets net. to 10 per cent.			Bailey's Victor, 25 per cent.			B. S. & M. Scales, 50 p.c.			Clout nails		
Christie, \$7.00 net.			PLANE IRONS.			Champion 60 per cent			Cigar box nails		
Hay knives, spear point, Lor T handle, 60			English, per doz. 2 00 5			SCRAPERS			Lining nails in papers		
to 60 and 10 per cent.			PLIERS AND NIPPERS.			Box, per doz. 2 10 4 50			" " in bulk		
Lightning, per doz. 6 50 8 40			Button's Genuine, per doz. pairs, dis. 37½			Boot, " 0 40 3			" " solid heads, in bulk		
Heath's, 52½ p.c.			40 p.c.			SCREENS.			Saddle nails in papers		
LADLES.			Button's Imitation, per doz. 5 00 9 00			Window, patent, per doz. 0 00 0 00			" " in bulk		
Melting, per doz. 1 70 4 50			German, per doz. 0 60 2 60			Door, per doz. 0 00			Tinned capped trunk nails		
LEMON SQUEEZERS.			PLUMBS AND LEVELS.			SCREW DRIVERS.			Double pointed tacks, discount 90 p.c.		
Porcelain lined, per doz. 2 20 5 60			S. R. & L. Co., dis. 70 and 5 to 70 and 10 p.c.			Sargent's per doz. 0 65 4 00			TAPE LINES.		
Galvanized, " 1 87 3 85			POPPERS.			SCREWS.			English, ass skin, per doz. 2 75 5 00		
King, wood, " 2 75 2 90			Corn, square, per doz. 1 35 2 00			Wood, F. H., iron, and steel, dis. 87½ & 10 p.c.			English, Patent Leather 5 50 9 75		
" glass, " 4 00 4 50			PRUNING SHEARS.			Wood, R. H., " dis. 80 and 10 p.c.			Chesterman's, each 0 90 2 85		
A glass " 1 20 1 30			Per doz. 4 00 5 50			" F. H., brass, dis. 82½ and 10 p.c.			steel, each 0 80 8 00		
LINES.			PULLEYS.			Drive Screws, 87½ and 10 per cent.			THERMOMETERS.		
Fish, per gross 1 05 2 50			Hothouse, per doz. 0 55 1 00			Bench, wood, per doz. 3 25 4 00			Tin case and dairy, dis. 75 to 75 and 10 p.c.		
Chalk, " 1 90 7 40			Axle " 0 22 0 33			" iron, " 4 25 5 75			THIMBLES.		
LOCKS.			Screw " 0 27 1 00			SCYTHES.			Asbestos, filled, per doz., 35 to 40 p.c.		
Canadian, dis. 50 p.c.			Awning " 0 35 2 50			Discount, 60 and 10 p.c. revised list.			TIES.		
Russell & Erwin, per doz. 1 75 7 50			PUMPS.			SCYTHE SNATHS.			Cow, per doz. 1 25 2 00		
Cabinet,			Rumsey or Canadian cistern, 60 p.c.			Canadian, dis. 45 to 50 p.c.			TINNERS' TOOLS.		
Eagle, dis. 30 p.c.			Pitcher spout, 70 and 10 p.c.			SHEARS			P. S. & W., 10 p.c.		
Padlock.			Canadian cistern, 60 p.c.			B. & W., japanned, dis. 75 p.c.			Canadian, 35 to 37½ per cent.		
English and Am., per doz. 0 50 6 00			Canadian pitcher spout, \$1.25 to \$3.			B. & W., N.P., dis. 65 p.c.			TINWARE.		
Scandinavian, " 1 00 2 40			PUNCHES.			Seymour's, dis. 60 p.c.			Stamped, dis., Assn. list, 80 and 10 per cent.		
Eagle, dis. 15 to 17½ p.c.			Saddlers, per doz. 1 00 1 85			Etna, dis. 75 to 75 and 10 p.c.			Japanned, prices on application		
MACHINE SCREWS.			Conductors, " 9 00 15 00			Heinisch, dis. 60 p.c.			Priced, prices on application.		
Iron and Brass.			Tinners' solid, per set. 0 00 0 72			" N.P., dis. 70 p.c.			CALKS (Steel)		
Flat head, discount 25 p.c.			" hollow, per inch. 0 00 1 00			Clausen, full nickel, 60 p.c.			Toe calks, per M. net		
Round head, discount 20 p.c.			PUTTY.			" japanned handles, 67½ p.c. off.			Heel calks, " " 4 10		
MAGNOLIA METAL, ETC.			Bladder, per lb. 1 75 0 17½			Seymour or Heinisch tailor shears, 15 p.c.			Discounts, for 10 boxes at oneshipment		
Magnolia Anti-Friction Metal, per lb. 25			Tins, lbs. 2 50 2 75			SHEAVES.			10 per cent.		
No Name Metal, " 18			RAIL.			Sliding door, per set. 0 77 1 40			TRANSOM LIFTERS.		
Mystic Metal, " 18			Barn door, per foot. 0 02½ 0 02½			SHOVELS AND SPADES.			Payson's, per doz. 2 60		
F. O. B. New York or Chicago.			Sliding door, " 0 03½ 0 03½			Canadian, dis. 45 and 2½ p.c.			TRAPS (Steel.)		
MALETS.			Lanes, " 0 02½ 0 02½			Game, H. & N., P. S. & W., 65 p.c.			Game, steel, 72½ p.c.		
Tinsmiths', per doz. 1 25 1 50			RAKES.			Mouse, per doz. 0 35 1 50			Game, steel, 72½ p.c.		
Carpenters', hickory, per doz. 1 25 3 75			Cast steel and malleable Canadian, list dis			Rat, per doz. 1 40 6 50			TROWELS.		
Lignum Vitae, per doz. 3 85 5 00			60 to 60 and 10 p.c. revised list.			SIEVES.			Diston's, discount 10 per cent.		
Caulking, each 1 60 2 00			Wood, 25 per cent.			Wood rim, black, per doz. 1 05 1 10			German, per doz. 4 75 6 00		
MATTOCKS.			RAZORS.			" tinned, " 1 25 1 35			Brade's 5 00 10 50		
Canadian, per doz. 8 50 10 00			Geo. Butler & Co.'s, per doz. 8 00 18 00			Tin rim, per doz. 2 30 2 45			S. & D., discount 35 per cent.		
American, 60 and 10 p.c. off list.			Boker's, " 7 50 11 00			" black. 1 8 2 25			TRIERS.		
MEAT CUTTERS.			Wade & Butcher's, " 3 60 10 00			SNAPS.			Butter, per doz. 6 25 9 00		
Enterprise, American, dis. 30 to 32½ p.c.			Arbenz's, " 9 00 18 00			Harness, German, dis. 35 to 37½ p.c.			TWINES.		
German, 15 per cent.			Theile & Quack's " 7 00 12 00			Acme " 3 00 5 00			Bag, Russian, per lb. 0 50		
MINCING KNIVES.			RAZOR STROPS.			Lock, Andrews " 4 50 11 50			Wrapping, mottled, per pack. 0 50		
American, per doz. 0 42 2 35			Currier's, per doz. 1 25 3 60			SOLDERING IRONS.			Wrapping, cotton, per lb. 0 17		
MOLASSES GATES.			RIVETS AND BURS.			Per lb. 0 23 0 25			Mattress, per lb. 0 33		
Stebbin's Patent, dis. per cent. 77½ per cent			4 mos. or 3 per cent. cash 30 days			WROUGHT SPIKES.			Staging, " 0 27		
NAILS.			Carriage, Section, Wagon Box Rivets, etc.,			Discount, 35 to 40 per cent.			Broom, " 0 30		
Cut Nails (Iron). Basis—50 to 60 dy. \$1.85			(Steel), 65 p.c.			SPOKE SHAVES.			VISES.		
f.o.b., Toronto, Montreal, Hamilton,			Carriage, Section, Wagon Box Rivets, etc.,			Wood, English 1 8 5 00			Hand, per doz. 4 00 6 00		
London.			(Norway Iron), 60 p.c.			ron, American. 1 35 2 35			Bench, parallel, each 2 00 4 50		
Cut Nails (Steel). Add 10c. to the prices in			Black M. Rivets (Steel), 65 p.c.			SPOONS AND FORKS.			Coach, each. 6 00 7 00		
list for iron nails.			Black and Tinned Rivets, 60 and 5 to 65 and 5			Tea spoons, per gross 7 50 12 00			Peter Wright's, per b. 0 12 0 13		
Wire Nails, basis, \$2 per keg Toronto. For			p.c.			Dessert, " 21 00 00 00			Pipe, each. 5 50 9 00		
places outside factory points, \$1.90 f.o.b.			Copper Rivets & Burrs, 50, 10 and 5 p.c. dis.			Table, " 30 00 30 00			Saw, per doz. 6 50 13		
Montreal. Carload lots, 5c. per keg less			" ½ lb. boxes and			Dessert Forks, " 24 00 00 00			WASHER CUTTERS.		
than above figures.			cartoons, 1c. per lb. extra, net.			Medium " 27 00 00 00			Per doz. 4 00		
Brads and finishing nails, special sizes, 80			Burs, iron or steel, 55 and 5 per cent.			Table " 36 00 00 00			Washers "Iron", 40 per cent., 4 month		
p.c. from new list.			Terms, 4 mos. or 3 per cent. cash 30 days.			SQUARES.			per cent.		
NAIL PULLERS.			RIVET SETS.			Iron, per doz. 1 65 2 90			WELL WHEELS.		
German and American 1 85 50			Canadian dis. 35 to 37½ per cent.			Steel, dis. 70 per cent., revised list.			Amer., per doz., 8, 10 and 12		
NAIL SETS.			ROPE.			Try and bevel, dis. 50 to 52½ p.c.			inch. 3 38		
Square, round, and octagon,			7-16 in. and larger, per lb. Sisal. 00 7½			STAPLES.			WIRE.		
per gross 3 38 4 00			¾ in. 6½ 00 7½			Fence, galvanized 2 50			Brass Wire, 16 to 25 wire gauge, 12½ p.c.		
Diamond 12 00 15 00											

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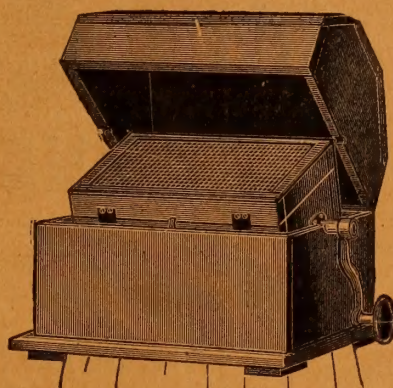
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